

SMOKE SIGNALS

For Radio Amateurs • By Radio Amateurs

Published Monthly Since 1969 • Our 30th Year

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Amateur restructuring details possible by year's end

Knowledgeable sources in Washington say the amateur license restructuring issue has moved to the front burner at the FCC, and a Report and Order could be released before the end of 1999.

The Amateur Radio community has been awaiting license restructuring -- known officially as the 1998 Biennial Regulatory Review of Part 97 (WT Docket 98-143) -- for nearly one year now. While no one has mentioned a hard-and-fast date to wrap up the long-awaited proceeding, reports from several sources suggest that the R&O draft is in its final stages and could be complete within a month or so.

During a recent visit to top FCC officials in Washington, League officials pressed again for early action on the license restructuring rulemaking. They were assured that the issue was not stalled and that the Wireless Telecommunications Bureau was "working very actively" to move restructuring along.

Whatever its final form -- and no one has hinted at that -- license restructuring poses significant implications for Amateur Radio and its future direction and growth. On August 10, 1998, the FCC proposed to phase out the Novice and Technician Plus

licenses, leaving just four amateur license classes in place--Technician, General, Advanced, and Extra. The Commission also asked the amateur community to express its opinions on Morse code requirements for licensing and testing, but offered no specific recommendations.

At its July 1998 meeting, the ARRL Board of Directors -- attempting to get the jump on restructuring -- issued its own plan to restyle Amateur Radio. Among other details, the ARRL plan also calls for four license classes and for "refarming" Novice/Tech Plus subbands to provide additional spectrum for higher-class operators. Under the League plan, the Technician license remains unchanged, and the General becomes the entry-level ticket to HF operation. The ARRL proposed Morse code requirements of 5 WPM for General and 12 WPM for Advanced and Extra class.

The restructuring debate generated more than 2200 comments to the FCC, many of them from individual amateurs. Once the FCC approves the Report & Order, a Public Notice will be issued, and the actual R&O will be released probably within a few days.

The ARRL Letter

Y2K eve communications support requested

Mack Brophy, N9NTB

All Wisconsin Amateur Radio Operators are requested to be ready to provide emergency radio communications support to the State and their local communities during the Y2K weekend and during any emergency.

Public service is one element of being a FCC licensed amateur radio operator.

Your support can best be utilized through coordination with your county ARES/RACES Emergency Coordinator or your county Emergency Manager. For the name of your county ARES/RACES Emergency Coordinator you can contact Dr. Stanley Kaplan, WB9RQR, at 1-262-234-9346 or by e-mail at: <skaplan@mcw.edu>.

While the possibility of a Y2K national or statewide emergency is considered to be low, there is the possibility of local power outages that may need the emergency communications support that amateur radio operators (hams) can provide.

At the present time numerous requests for ham support are being received from various government agencies, the American Red Cross, and public service companies, e.g., electric power utilities. These requests are sometimes too numerous to be filled by just the local ARES/RACES hams.

If you or your local amateur radio club is available to help, please contact Dr. Kaplan as soon as possible in order to coordinate ham support with the requesting entities. Time is of the essence as we rapidly approach the start of a new year. Your help will be greatly appreciated.

Wisconsin Emergency Management acknowledges and greatly appreciates the

emergency communications support that hams have provided in the past. With the uncertainty of what effect the Y2K bug will have on the various communication systems, it is anticipated that there may be a need for ham support during the Y2K New Year's Eve weekend. Alan Wohlferd, Wisconsin Emergency Management Warning and Communications Officer, has asked me to forward the following request to those hams that may be volunteering to assist at locations other than their home.

During Weyauwega hams from 42 counties provided mutual aid to the Weyauwega hams to help man the EOC, Forward Command Post, road blocks, etc. One complaint that was received at WEM was that hams were arriving at their volunteer duty positions with additional personnel that were not hams. This necessitated the lodging and feeding of these additional personnel that were not providing communications support. It is requested that hams make the welfare of their families their first priority and that they do not volunteer for a remote duty position if they cannot be separated from their family. Non ham personnel that wish to volunteer during the Y2K New Year's Eve weekend are encouraged to contact their local American Red Cross office because they are always in need of message runners, telephone answers, shelter help, etc.

Thanks everyone for your cooperation and understanding and for your support to the State and to your community.

73, Mack, N9NTB
Amateur Radio Liaison/State Ham Shack
Manager
Wisconsin Emergency Management
1-608-242-3323
e-mail: <racas@dma.state.wi.us>

**Merry Christmas
and
Happy New Year
Happy Hanukkah
Season's Greetings**

From the Badger State Smoke Signals crew:

Kenneth A. Ebner, K9EN
Publisher/Chairman

Donald A. Evenson, K9JYX
Production Advisor

Jim Romelfanger, K9ZZ
Editor

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Edited by Kenneth A. Ebnetter, K9EN, 822 Wauona Trail, Portage, WI 53901 • kebnetter@palacenet.net

Swapfests and Other Social Events

SATURDAY, NOVEMBER 6, 1999. "6.91 Friendly Fest" Amateur Radio and Computer Expo '99, Waukesha County Expo Center Forum, N1 W24848 Northview Rd., Waukesha, WI. Talk in on 146.91 (The Friendly Repeater) Contact: The Milwaukee Repeater Club, Box 2123, Milwaukee, WI 53201-2123. (887) 672-3378. Web page <http://www.execpc.com/~mrc> or e-mail mrc@execpc.com

SUNDAY, NOVEMBER 7, 1999 Fox Cities ARC Hamfest, Kaukauna, WI. Contact: FCARC, 1912 Russett Ct., Apt. #7, Appleton, WI 54914. (Attn: Chad Pennings (N9PRC). (920)993-0485.

SUNDAY, NOVEMBER 14, 1999. The Chicago ARC Ham Auction, DeVry Institute of Technology, 3300 N. Campbell Ave. Chicago, IL 60618.

SUNDAY, NOVEMBER 28, 1999. RADIO FEST, Dupage County Fairgrounds, Wheaton, IL. Contact: GMRS of Illinois, 219 N. Willow Dr., E. Plainfield, IL 60544.815 436-7090

SATURDAY, JANUARY 8, 2000. 28th Midwinter Swapfest, Waukesha County Expo Center Forum, Waukesha, WI. Contact: WARAC Swapfest, PO Box 1072, Milwaukee, WI 53201, or call Phil, W9NAW (414) 425-3649.

SUNDAY, JANUARY 9, 2000. South Bend Hamfest, South Bend, IN. Contact: Michiana Valley Hamfest Association, 21970 Kern Road, South Bend 46614.

SUNDAY, JANUARY 23, 2000. Wheaton Community Radio Amateurs Mid Winter Hamfest, Cicero,

IL. Contact: WCRA, PO Box QSL, Wheaton, IL 60189. www.w9ccu.org

TUESDAY, FEBRUARY 22, 2000. Red Cedar Repeater Assn. AUCTION, American Legion Post 53, 634 Water St., Eau Claire, WI. Contact: Steve Hjart, KA9OMC, E616 810th Ave., Knapp, WI 54749. (715) 665-2374.

SUNDAY, MARCH 12, 2000. SEWFARS SWAPFEST, Waukesha County Expo Center, Waukesha, WI. Contact: SEWFARS, PO Box 102, Delafield, WI 53018 (414)835-7035.

SUNDAY, MARCH 26, 2000. NRSCfest, Lake County Fairgrounds, Grayslake, IL. Contact: North Shore Radio Club, NS9RC, Box 1066, Highland Park, IL 60035. www.ns9rc.org

FRIDAY-SATURDAY, APRIL 7-8, 2000. AES SUPERFEST 2000

SUNDAY, APRIL 9, 2000. MADISON REPEATER ASSOCIATION SWAPFEST. New location, Stoughton, WI. Contact: MARA, PO Box 8890, Madison, WI 53708-8890. 608 245-8890 <http://www.qsl.net/mara>

SATURDAY, MAY 6, 2000. Ozaukee Radio Club 22nd Annual Radio and Computer Swapfest, Circle-B Recreation Center, Highways 60 and County I (located 20 miles north of Milwaukee, west of Grafton). Contact: Joe Holly, ORC Swapfest Chairman, 1702 Holly Lane, Grafton, WI 53024. (262) 377-2137 or Skip Douglas (262) 284-3271.

SATURDAY, MAY 13, 2000. Mancorad Hamfest, Manitowoc, WI.

SUNDAY, JUNE 4, 2000. The Starved Rock Radio Club Hamfest, Bureau County Fairgrounds, Princeton, IL. Contact: EBREDERIS/SSRC, 262 Easy St., Somonauk, IL 60552-9605. website w9mks@arrl.net. e-mail erb.n9pib@juno.com.

SATURDAY, JUNE 10, 1999. Eau Claire ARC W9EAU Hamfest. Contact: Jim Staatz, KG9MV, PO Box

1867, Eau Claire, WI 54702-1867. (715) 838-9108. e-mail kg9mg@ecol.net web-page <http://www.ecarc.org>

SUNDAY, JUNE 11, 2000. DuPage County Fairgrounds, Wheaton, IL. Contact: Joseph Gutwein, WA9RJ1, 7109 Blackburn Ave., Downers Grove, IL 60516. 708)442-4961

SATURDAY, JULY 8, 2000. South Milwaukee Amateur Radio Club Swapfest, American Legion Park, Shepard Avenue, South Milwaukee, WI. Contact South Milwaukee ARC, P.O. Box 102, South Milwaukee, WI 53172. (414) 762-3235.

SATURDAY, AUGUST 12, 2000. Circus City Swapfest, Sauk County Fairgrounds, Baraboo, WI. Contact: Steve Schulze, N9UDO, (608) 356-2313/356-4777 or Bill Klinkner, N9KXX, (608) 643-6908/643-6453. web-page <http://www.thelorax.com/~sschulze/hamfest.htm>

SATURDAY-SUNDAY, SEPTEMBER 16-17, 2000. Peoria Superfest 2000, Peoria IL. Contact Don Stedman, KB9LFD, PO box 3508, Peoria IL 61612-3805. e-mail dls@mtco.com or web site www.mtco.com/~dls



CLUB MEETINGS

Due to space limitations, we cannot always carry the full listing of Wisconsin and area club meetings. Please see the September 1999 meetings column for the latest complete listing. The following changes have been reported to BSSS since that listing.

FOX CITIES AMATEUR RADIO CLUB
Third Mon. - 7:00 p.m. - Columbus Club, Appleton, WI.

QCWA - WISCONSIN CHAPTER #55
Contact Treasurer, Ted Stiller, WA9RDI, 4648 N 90th St., Milwaukee, WI 53225, for information about meeting dates or joining QCWA Chapter #55. The Wisconsin Chapter holds Spring and Fall dinner meetings on the first Saturday of June and October.

The Test Point



**Amateur Radio Examination Locations
and Schedules in the Wisconsin Area**

December 04, 1999	Oshkosh (Omro), WI
December 04, 1999	Racine, WI
December 04, 1999	St. Paul, MN
December 09, 1999	Apple Valley, MN
December 11, 1999	Blaine, MN
December 11, 1999	Madison, WI
December 18, 1999	Cottage Grove, MN
December 18, 1999	Loves Park, IL
December 18, 1999	Milwaukee, WI (BE)
December 18, 1999	Oshkosh, WI (R.A.W.)
December 21, 1999	Eden Prairie, MN
January 08, 2000	Blaine, MN
January 08, 2000	Eau Claire, WI
January 08, 2000	Madison, WI
January 08, 2000	Sheboygan, WI
January 13, 2000	Apple Valley, MN
January 15, 2000	Cottage Grove, MN
January 15, 2000	Loves Park, IL
January 15, 2000	Milwaukee, WI (BE)
January 18, 2000	Eden Prairie, MN
January 22, 2000	Appleton, WI
January 22, 2000	Bloomington, MN
January 29, 2000	Milwaukee, WI (MRAC)
January 29, 2000	Tomahawk, WI
February 05, 2000	Oshkosh (Omro), WI
February 05, 2000	Racine, WI
February 05, 2000	St. Paul, MN
February 10, 2000	Apple Valley, MN

Badger State Smoke Signals

**Amateur Radio
Education and Information**

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EDITORIAL BOARD: Ken Ebnetter, K9EN; Don Evenson, K9JYX; Jim Romelfanger, K9ZZ.

Subscriptions

1 year	(12 issues)	\$13.95
2 years	(24 issues - save \$1.95)	\$25.95

Subscription form is on page 5. Special club package reduced rates are available. For information, contact Ken Ebnetter, K9EN.

When to Send It

The closing date for each issue is the first of the month for the next month's issue. For example, the closing date for the June issue is May 1. The only exception is for participating clubs' minutes. Participating clubs are requested to send their material no later than FIVE DAYS after the club's meeting. For example, if a club meets on the 4th of the month, the material should be sent no later than

the 9th of that month. This material is to be sent to the Editor.

Where to Send It

Address changes and corrections, and exchange papers should be sent to Ken Ebnetter.

Editorial material, photographs, and feature articles should be sent to Jim Romelfanger.

Inquiries about advertising should be directed to Ken Ebnetter.

Club, swapfest, and Test Point information should be sent to Ken Ebnetter.

Swapfest ADS should be sent to Jim Romelfanger NO LATER THAN EIGHT WEEKS BEFORE THE EVENT'S DATE.

Subscriptions should be sent, with check or money order, to Ken Ebnetter.

Conditions for Reprinting or BBS Posting Material from Badger State Smoke Signals

Permission is hereby granted to reprint articles or posting articles on radio or telephone bulletin boards from *Badger State Smoke Signals*, providing credit is given to the original author, publication in which the article first appeared, and to *Badger State Smoke Signals*. THIS CREDIT IS MANDATORY, AND NO MATERIAL MAY BE PRINTED OR POSTED UNLESS IT IS GIVEN.

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Badger State Smoke Signals is incorporated as a Wisconsin non-stock, non-for-profit organization.

Editorial Disclaimer

The opinions expressed in editorials, guest editorials, columns, articles, and letters from readers are the opinions of the authors only, and do not, unless otherwise stated, express or imply endorsement by *Badger State Smoke Signals*, or by any other individual or organization.

February 12, 2000 Blaine, MN
 February 12, 2000 Madison, WI
 February 15, 2000 Eden Prairie, MN
 February 19, 2000 Cottage Grove, MN
 February 19, 2000 Oshkosh, WI
 February 19, 2000 Loves Park, IL
 February 19, 2000 Milwaukee, WI (BE)
 February 26, 2000 Bloomington, MN
 February 26, 2000 Milwaukee, WI (MRAC)
 February 26, 2000 Tomahawk, WI
 March 04, 2000 Oshkosh (Omro), WI
 March 04, 2000 Racine, WI
 March 04, 2000 St. Paul, MN
 March 09, 2000 Apple Valley, MN
 March 11, 2000 Blaine, MN
 March 11, 2000 Madison, WI
 March 18, 2000 Cottage Grove, MN
 March 18, 2000 Loves Park, IL
 March 18, 2000 Milwaukee, WI (BE)
 March 21, 2000 Sheboygan, WI
 March 21, 2000 Eden Prairie, MN
 March 25, 2000 Appleton, WI
 March 25, 2000 Bloomington, MN
 March 25, 2000 Milwaukee, WI (MRAC)
 March 25, 2000 Tomahawk, WI
 April 22, 2000 Oshkosh, WI
 May 13, 2000 Manitowoc, WI
 May 20, 2000 Sheboygan, WI
 July 18, 2000 Sheboygan, WI
 October 21, 2000 Oshkosh, WI
 September 09, 2000 Appleton, WI
 September 16, 1999 Sheboygan, WI
 November 05, 2000 Kaukauna, WI
 November 21, 2000 Sheboygan, WI
 December 16, 2000 Oshkosh, WI
 January 27, 2001 Appleton, WI
 Monthly, 1st Sat. Racine, WI
 (except January, July & August)
 Monthly, 1st Sat. Oshkosh (Omro), WI
 Monthly, 1st Sat. St. Paul, MN
 Monthly, 2nd Thu. Apple Valley, MN
 Monthly, 2nd Sat. Madison, WI
 Monthly, 2nd Sat. Blaine, MN
 Monthly, 3rd Tue. Eden Prairie, MN
 Monthly, 3rd Sat. Milwaukee, WI (BE)
 Monthly, 3rd Sat. Loves Park, IL
 Monthly, 3rd Sat. Cottage Grove, MN
 Monthly, 4th Sat. Bloomington, MN
 Monthly, Last Sat. Milwaukee, WI (MRAC)
 (except December)
 Monthly, Last Sat. Tomahawk, WI
 (January thru October only)
 Quarterly Eau Claire, WI
 (Second Saturday Jan., Apr., & Oct.)
 plus annual summer hamfest.)

Many Swapfests/Hamfests offer exam sessions. If not shown above contact the sponsoring club in the Swapfest column on page 2.

The FCC now requires applicants to show their ORIGINAL AMATEUR LICENSE to the VEC. A copy of your license must be attached to your FCC form 610. You will also be required to have a photo ID, or other acceptable identification.

GENERAL RULES

FOR MOST EXAMINATIONS:

Be sure to check with sponsors in the event there are changes and/or errors in the dates or information given.

Some examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs permit walk-ins. Check with sponsor.)

To register, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from an FCC Field Office, the ARRL. Send a 32c/ SASE if you request one from the ARRL. In most cases, forms can also be obtained from the sponsoring group.

ARRL/VEC examinations require a check for \$6.45 (2000 fee \$6.65) payable to "ARRL/VEC".

The FCC now requires applicants to show their ORIGINAL AMATEUR LICENSE or CSCE to the VEC. You must also have two good copies of your license or CSCE. A copy of your license or CSCE must be attached to your FCC form 610 and most VEC want a copy for their records. You will also be required to have a photo ID, or other acceptable identification.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only.

For those with internet access, a listing of exam sessions is available from:

<http://www.arrl.org/arrlvec/examsearch.phtml>

By checking this page, a person can find out registered VE sessions anywhere in US and some overseas. You can search by country, state or zip code. The listing is not specific to any particular VEC, it is a master database. (Thanks to KB9EQI for information.)

MILWAUKEE RADIO AMATEURS' CLUB (MRAC/VEC)

LAST SATURDAY - MILWAUKEE, WI

LAST SATURDAY: (except June, July and August):
 9:30 a.m. to 12:00 noon at Amateur Electronic Supply (AES), 5710 W. Good Hope Rd., Milwaukee, WI. Note:

For Additional Information: Call (414) 797- MRAC (Answering Machine). or (414) 797-6722.

Bring along your ORIGINAL license, CSCE (if any) and one (1) good quality photocopy of each, plus two forms of identification, such a driver's license, etc. Also required is \$6.40 for the exam fee. WALK-INS are welcome. To register in advance, use a post card: Print the grade of license you are applying for, your name, address, and telephone number. Send the card to MRAC/VEC, Milwaukee Radio Amateurs Club, PO Box 25707, Milwaukee, WI 53225.

BADGER EXAMINERS (BE) - MILWAUKEE

Badger Examiners group tests at AES (Amateur Electronic Supply) at 60th and Good Hope, every third Saturday MORNING. Exam times are 9:30 a.m. to 12:00 noon, at the old Serman Printing shop, just 300 feet west of the AES store. Novice to Extra are offered, and all test materials are provided. Fee is \$6.35, and bring your original license, or CSCE if needed. Also available are Commercial license exams GROL (General Radiotelephone license), GMDSS, Telegraph, Etc. Fee is \$35.00. For more information call Gary Sharbuno, W19M at (414) 355-0237.

MADISON, WI

Exams are the given every second Saturday morning at 8 a.m. No pre-registration required. They are held at the Madison Metropolitan Sewerage District operations building at 1610 Mooreland Road. Directions: Take the beltline (Highway 12 and 18) to South Towne Drive. Go south 8/10 mile until South Towne Drive makes a bend and becomes Moorland Road. Enter at the gate. Bring a picture ID, your original license and any CSCEs along with a photocopy of each, and a check for 6.45 payable to ARRL/VEC. For further questions, please call Tim, WO9U at 608-233-9829.

MENOMONIE, WI

The Menomonie area hams will conduct VEC Exams for all classes of licenses on Saturday, November 6, 1999. The location will be the U.W.-Stout, Communications Center, 820 S. Broadway, Menomonie Wisconsin. Walk-ins only. Arrive between 9:00 and 11:00 AM. For information, contact Jim Ley, NX9F, 715-232-1397 (W) or

STEVENS POINT, WI

ARRL Exams in Stevens Point, Time: 0930. Place: A107 Science Building, on campus at UWSP (corner of Fourth and Reserve streets) For more information contact Joe Larson, N9JW, at 715- 344-1182 evenings or email to joel8@bigfoot.com.

RACINE, WISCONSIN - ARRL/VEC

Monthly - first Saturday, except January, July, and August.

Monthly exams are given 9:00 to 11:00 a.m. at the Faith United Methodist Church, 1013 Harmony Drive, Racine. Walk-ins are permitted. Talk in on 147.87/27. Inquiries and registrations should be directed to Robert N. Jensen, W0WLN, 5616 Cambridge lane #6, Racine, WI. Telephone (414) 886-8551.

TOMAHAWK, WI

Last Saturday of every month. Jan. thru Oct.

Tomahawk Volunteer Examiners (ARRL/VEC). Tomahawk, WI. No preregistration required, but appointment would be appreciated. Registration at 8:30 a.m. and testings starts at 9:00 a.m. For location or other information, inquire on 145.43 MHz. repeater or contact: Terry Collins, KB9AUP, W6564 Highway 8, Tomahawk, WI 54487. Telephone (715) 453-4633.

APPLETON, WI - ARRL/VEC

MANITOWOC, WI (HAMFEST)

KAUKAUNA, WI (HAMFEST)

Conducted by the Fox Cities ARC VE team. All test sessions in Appleton are held at American Red Cross Building in Appleton. For more detailed information contact: George R. Croy, W9MDP, (920) 730-0967. W9MDP@arrl.net

OSHKOSH (OMRO)

The Oshkosh VE Team will administer Amateur Radio exams monthly on the first Saturday. Registration begins at 8:30 a.m. and exams will be given from 9 a.m. until noon at the Omro Community Center, 130 W. Larrabee, Omro, WI. Walk-ins welcomed. Bring a good quality photocopy of your original license and any other necessary documents such as a CSCE, etc. The first session will be through W5YI/VEC, and then sessions will alternate between Additional information is given below.

ARRL/VEC and W5YI/VEC. The exam fee is \$6.35 (\$6.65 for 2000). For more information, please call Dick Lemme, K9FA, at (920) 235-0987, e-mail lemme@vbe.com, or write Dick at 826 Jefferson Street, Oshkosh, WI 54901.

OSHKOSH, WI (R.A.W.) - (W5YI/VEC)

December 18, 1999. Sponsored by Radio Amateurs of Wisconsin (R.A.W.) Testing sessions at UW Oshkosh, College of Nursing Building, 845 Algoma Blvd., Room 211, Oshkosh, WI. Park free in lot 29 on side of building or in lot 25 behind the building. Registration start at 9 a.m. \$6.35 per test. Bring 2 forms of id etc. Walk-ins are welcome. Contact: Mark Miller, N9WT, (920) 231- 1662 or Mike O'Conner, K9II (920) 231-7093.

EAU CLAIRE, WI

The Eau Claire ARC will hold exam sessions on the second Saturday in the months of January, April, and October, as well as on the date of their annual hamfest during the summer. For more info: Steve Bluem KA9OMY 715-839-6509

SHEBOYGAN, WI

2000 schedule for Sheboygan VE testing.

Saturdays 8:30AM registration, 9:00AM testing.

January 8, May 20, September 16

Tuesdays 6:30PM registration, 7:00PM testing.

March 21, July 18, November 21

All testing sessions will be held in the Red Cross Building, 2032 Erie Avenue, Sheboygan, WI, in the main level classroom area. This testing site is handicapped/wheelchair accessible. Pre- registration is appreciated so we don't get caught short, but walk-ins will be welcome. Contact Art Pahr, K9XJ, N8029 Willow Road, Plymouth, WI 53073-2929. 920-876-2370 or by e-mail k9xj@excel.net

ONALASKA, WI (ARRL/VEC)

The Riverland Amateur Radio Club will hold test sessions at the Onalaska Public Library, 741 Oak Avenue South. registration begins at 9:00 a.m. Please bring two forms of identification and two copies of all original documents, CSCEs, license, etc. For more information contact: Roger Reader, KA9BKK, 526 13th Ave. N., Onalaska, WI 54650. (608) 783-0723.

MEDFORD, WI (ARRL/VEC)

Taylor County Area AREC. Registration starts 8:30 a.m., testing starts 9:00 a.m. Location: The conference room in the lower level of the Sheriff's annex to the Taylor County Courthouse, corner of 2nd and Ogden Sts., Medford, WI. Take Ogden St. west off of Hwy. 13 to the courthouse. Park in the lots on the east or south sides of the courthouse or on the street. PLEASE use the entrance on the south side of the courthouse and watch of the signs. Walk-ins welcome. Contact: Tom Hrdina, N9GEN, 2373 Willow Ave., Medford, WI 54451. (715) 748-4054

PEWAUKEE, WI

The location is a little more handicap accessible, room S112 in the back of the science building by the handicap parking entrance. WCTC is on Hwy JJ off Hwy 16 from the East I-94 and Hwy T from West I-94 just north of GE Medical Systems. Tests start at 9:00 AM and registration ends at 10:00 AM. Contact: Al Johnson, AA7CS, (414) 568-0836; Roger Bradley, AA9OJ, (414) 691-3089 or SEWFARS Repeater club c/o Jam Lazachek, KF9GG (414) 650-0724.

HUDSON, WI (ARRL/VEC)

Sponsor: St. Croix Valley AR Testing Col. Time: Call for time and walk-in info, Contact: Gregory Miller (715) 386-9857

Location: St. Croix County Emergency, Government Center by jail, Carmichael Rd. lower level, Hudson, WI 54016. (Information tnx ARRL Web site)

FRIENDSHIP, WI (ARRL/VEC)

Sponsor: Adams County ARC. Location: Adams-Columbia electric Cooperative (Community Room), 410 E. Lake St., Friendship, WI 53934. Contact: Karl Simonson, KB9EQI, (608) 565-6533. kb9eqi@iname.com

CEDARBURG, WI - ORC HAMFEST

EAU CLAIRE, WI - ECARC HAMFEST

GREEN BAY, WI - ARES HAMFEST

HAYWARD, WI - HAYWARD HAMFEST

KAUKAUNA, WI - SWAPFEST

MANITOWOC, WI, LAKESHORE HAMFEST

OAK CREEK, WI - SMARC HAMFEST

RACINE, WI - RACINE HAMFEST

RHINELANDER, WI - NWARC SWAPFEST

ROCKFORD, IL - RARC HAMFEST

ROTISCHILD, WI - WVRA HAMFEST

SOUTH MILWAUKEE, WI - SMARC HAMFEST

STEVENS POINT, WI - CWRA SWAPFEST

WAUKESHA, WI - KMRA SWAPFEST

WAUKESHA, WI - MIDWINTER SWAPEEST

DUBUQUE, IA - HAMFEST

See the Swapfest column for additional information and contact persons.

DUBUQUE, IA - ARRL/VEC Dubuque Hamfest.

Contact: Carl Clark, N0KAX, 2145 Delicia Drive, Dubuque, IA 52001. (319) 557-9149.

ROCKFORD/LOVES PARK, IL

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Northern Illinois Volunteer Examiners (W5YI VEC). Held at North Suburban District Library, 6340 North Second St. (Hwy. 251), Loves Park, IL. 9:00 a.m. to noon. No new applicants after 11:00 a.m. Walk-ins welcome. Contact: Rusty Cordell, WB9QYV, 1823 Hulin St., Rockford, IL 61102-2619. (815) 968-0080. e-mail WB9QYV@aol.com

MINNESOTA TEST INFORMATION (change)

From "The Ground Wave", Saint Paul Radio Club.

Saint Paul Radio Club (SPRC)

Contact: Lou Sica, Jr., (651) 481-8522

Capital Column

Jim Lackore, AD9X
ARRL Wisconsin Section
Government Liaison

Government and the Radio Amateur

We Amateur Radio Operators often take for granted that which has been given to us by the federal, state, and local governments: e.g., the frequencies allocated for our use, the protection from unlicensed operators and malicious interference, the significant degree of self-regulation we have been allowed, the right to install antenna systems and to operate within reasonable restrictions and guidelines, and the general good will and high regard extended to us by legislative bodies and administrative agencies.

It is very important that we be alert to attempts by government to take away or to

alter (to our disadvantage) those privileges we have been granted. Moreover, we must be prepared to defend our privileges by communicating our concerns to our legislators and government officials and reminding them of the vital service we freely and voluntarily provide to state and local governments when our emergency and public service communication skills are needed.

Of particular importance to us at the present time is H.R. 783 (Amateur Radio Spectrum Protection Act). This legislation would protect our frequency allocations by requiring the FCC to provide equivalent replacement spectrum should it ever need to reallocate Amateur Radio spectrum allocations. Currently, this bill has over 100 House of Representative sponsors, only one of whom - Representative Kind, 3rd District - is from the Wisconsin Congressional delegation. The bill is still in House Telecommunications Subcommittee of the House Commerce Committee and its fate is uncertain, given all the other higher priority matters still undecided by the Congress in the waning days of this session. Write your congressperson today, expressing your support for H.R. 783.

Other matters of significant interest to Wisconsin Amateur Radio operators include:

- Support for federal preemption of state and local telecommunications regulation.
- Radio spectrum management.
- Enforcement of Telecommunications Law.
- License fees only for services or benefits.
- Mandatory RFI standards for consumer electronic devices.
- Adequate regulatory protection for the Amateur Radio Service.
- Amateur Radio license exam reimbursement.
- Opposition to restrictions on radio reception.
- Support for the Military Affiliate Radio System (MARS).
- Opposition to unreasonable state and local antenna restrictions.

I intend to discuss each of these topics in future editions of Capital Columns which will appear exclusively here in BSSS. Meanwhile, if I can be of help to any Wisconsin Amateur Radio operator in providing additional information or the names and addresses of congressional or state legislators, please feel free to contact me.

Email: <jlackore@aol.com>.

Snail mail: Jim Lackore (AD9X), 465 Agnes Drive, Madison, WI 53711.

FAX: 608-233-3808.

John Offerdahl, KC9XH/W9XH, SK

John Offerdahl, ex-KC9XH, passed away Thursday, November 4, 1999 at the age of 46 after a long battle with diabetes. John was well known by many hams in the Madison area because of his dedicated work with the South-Central Wisconsin Skywarn Net on the 146.88 repeater in the late 80s and early 90s.

He had also served as president of the Four Lakes ARC in Madison and as ARES District Emergency Coordinator for the South-Central Wisconsin. John was also actively involved in amateur radio public service events, especially those in the Verona/Mount Horeb area. He had served as the main net control station for amateur radio support of the Madison Marathon since its inception in 1994.

John had been a police officer in Sun Prairie for several years but was challenged with many health problems caused by Type I Diabetes, including blindness. He went back to school, obtained a law degree, and began practicing law in Verona in 1990. He served as Scoutmaster of Boy Scout Troop 349 in Verona briefly before reluctantly resigning because of health problems.

John was well-known on the air as KC9XH but had recently taken advantage of the vanity call sign program to modify his call to a slightly shorter W9XH earlier this year.

Despite his many health difficulties, John was never known to be a complainer, but always rose to the occasion to give of himself. His memorial service was held Sunday, November 7th at a packed West Madison Bible Church. The standing-room-only crowd of relatives, friends, scouts, and hams was encouraged to celebrate John's life and his new beginning with his Lord. John is survived by his wife Rita, N9EZX, and son Eric, KB9NAL.

Godspeed, John. We'll miss you.

Tom Weeden, WJ9H

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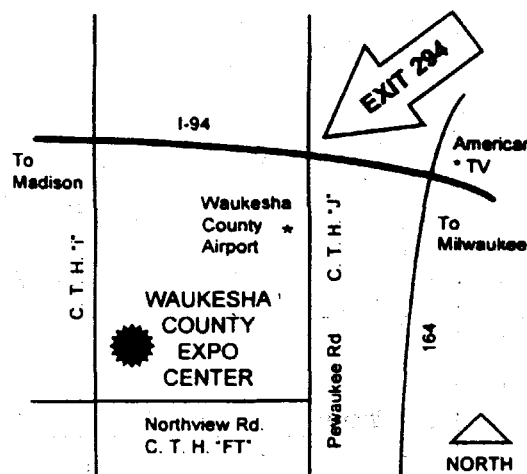
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Another ARISS delay

Initial ARISS equipment flight again delayed: The schedule once again has been reset for space shuttle mission STS-101, which will carry the initial Amateur Radio on the International Space Station gear aloft. NASA now says the shuttle Atlantis will launch no earlier than March 16, 2000. The nearly 11-day mission will carry the initial Amateur Radio station equipment to the ISS for deployment aboard the Russian-built service module. Wiring inspections and repairs on the Atlantis orbiter, along with the unplanned replacement of the ammonia boiler, are responsible for the most recent delay. Observers also are keeping an eye on the situation in Kazakhstan, where a Russian Proton rocket recently was lost following launch from the Baikonur Cosmodrome. Processing of the Zvezda ISS service module continues.

The Proton launch vehicle is similar to the rocket that will bring Zvezda to orbit. NASA reports that it's too early to determine what, if any, impact the launch failure could have on Zvezda's launch schedule. NASA and Russia had wanted one month's spacing between the launch of the service module and STS-101.

-- NASA in

LOOKING ON:

Who the heck are they, anyway?

An odd bunch, these people. Even some Amateur Radio operators are among them, but there are millions of them in all vocations and avocations. They lurk everywhere. They work hard. They do so many tasks it isn't possible to make "statistics" out of them. Sometimes, they even fight for the privilege to work at tasks that are sometimes pleasant, sometimes pretty doggone rough. But still they do it. Some even spend considerable sums of money to do it. And many other people just cannot understand why they do what they do. Yet, without them, a lot of things we take for granted would be crippled or even completely stalled.

I'm talking about volunteers.

In ham radio, there are some who volunteer their time, their expertise, use of their equipment, and even pay real money, to work hard - with no compensation and with no expectation of even a "thank you". In the money-oriented society that is the U.S. of A. volunteers probably are the biggest puzzle ever to perplex folks with tons of money. In fact, volunteers probably take their work and tasks more seriously than if they were paid. They aren't working because they *have* to. They do it because they *want* to.

It's safe to say that some ham operators are not interested in working public service communications. Hey, that's OK. Everyone is an individual, each with her or his own reason for being a ham. Many hams are very involved in public service work. But there is room for all of us.

Radio amateurs are fighting right now to get a bill passed by the Congress of the United States, the "Amateur Radio Spectrum Protection Act". If that act does not pass the Congress - both the House and the Senate - and thus is not made law by the president's signature, we have lost a very important opportunity to protect this hobby and all the taxpayer-free public service communications it provides the citizens of this country.

Volunteers. What drives them? It can be one thing only: To do something for others, to do it well, and know it was done the very best way possible. If a volunteer looks for accolades and recognition, he or she won't be volunteering very long. The only real "pay" for a volunteer is the satisfaction of doing a job, giving it 100% effort, and getting it done.

Next time you find yourself wondering why volunteers do what they do, pick up this column and read it again. And pay attention.

Jim Romelfanger, K9ZZ
Editor

* For more about the Amateur Radio Spectrum Protection Act, see AD9X's column on page 4, or <<http://www.bsss.org>>.

FCC approves test reimbursement fee

The FCC has announced that the maximum Amateur Radio examination fee reimbursement that Volunteer Examiners and Volunteer Examiner Coordinators can collect during calendar year 2000 is \$6.66. The ARRL/VEC has set its 2000 test fee at \$6.65. Per ARRL-VEC policy, there is no examination



charge for those taking only Elements 1A or 2. A \$6.65 fee will be collected from applicants seeking to upgrade using a physician's certification to waive the Morse code examination.

-- Bart J. Jahnke, W9JJ, in *The ARRL Letter*

<http://www.bsss.org>

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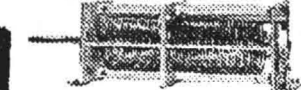
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W9NGT story available on Web

Readers who enjoyed reading the journal of Sherm Carr's journey on the USCG Cutter "Glacier", which ran in a six-part series from January to June of this year, can now read it on the BSSS Web site, <http://www.bsss.org>. Sherm was a working passenger on the ship on her final voyage from Melbourne, Australia to Astoria, Oregon, where she was decommissioned. Sherm (W9NGT) earned his keep by running phone patches for Glacier's crew. His son, Mike, was posted to Glacier, and father and son had a once-in-a-lifetime experience that lasted a month. The memories will last a lifetime.

Glacier was an icebreaker. Sherm came aboard during her journey from the Antarctic.

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DECEMBER 1999

The Computer Corner

By Stan Kaplan, WB9RQR • 105 Martin Drive
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(414) 284-9346
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SKAPLAN @ MCW.EDU



No. 73: The Best Available Cure-All for Windows

First things first. Say Happy Birthday to Computer Corner. Last month's article was the end of the sixth consecutive year of this column, and this issue is the beginning of the seventh.

Lest you begin to suspect it after reading this issue, no I do not work for Symantec, the company that produces Norton Utilities. It is just that, when a mechanic finds a very, very useful wrench, one that makes his work soooo much easier, he tends to rant and rave about it. That is how I feel about Norton Utilities, and have felt that way since back in the 1970s when I was first introduced to it. It makes my work soooo much easier.

If you have Norton Utilities, or better, Norton SystemWorks 2000 (the latest), but have not really put it to use, do so soon. I really recommend the System Check utility for identifying and correcting errors with all types of problems. If you launch this utility with all options selected, it will examine your system for disk and Windows problems as well as making suggestions to improve performance and keep up with your preventive maintenance. Probably the most valuable part of the scan it does is to examine your Windows Registry, a large database that relates every part of your system. Just as one example, it will look for missing programs if they exist somewhere other than where the Registry thinks they are. If it finds them, it will correct the Registry and any shortcuts so that they can be found when you call for that program to be used. If it cannot find them, it will remove (but only with your permission) any reference to them from the Registry. This restores your ability to use the program when you call for it, or prevents an error message from appearing when you try to use a program that no longer exists on your system. In other words, it cleans up your system so that it works as it should. Norton WinDoctor (another utility), does much the same, but it skips some of the hardware checks that System Check includes. Both are there for you to use, but the

System Check is more comprehensive. System Check alone is worth the price of the package, in my opinion.

There are many other goodies included with the package. The old standby, Norton Disk Doctor is there, which finds and corrects lost or cross-linked clusters. Cross-linked clusters describes the situation in which two different files are assigned one or more of the same clusters, something to be avoided like the plague. A lost cluster is data on the disk that DOS (Disk Operating System) thinks is assigned to a file, when it really is not. Yes, DOS exists, under both Windows 95 and 98! Windows is just a Graphical User Interface and must ask DOS to carry out many of the functions it wants to have done. At any rate, NDD will find and correct those errors, making your system perk along without losing your valuable data. Another old standby, Unerase, is there too. Did you ever accidentally delete a file? Unerase can bring it back, quickly and easily. It can do that because when you delete a file, you do not really erase it from the disk. Rather, the first letter of the filename is changed to a symbol that tells DOS that the space occupied by the file on the disk may be re-used. If you ask Unerase to restore it quickly, before writing a bunch of other stuff to the disk, the utility can do a perfect job. This is almost always the case with files moved to the wastebasket.

Speed Disk is another utility that has been around for a long time. Indeed, this utility is what gave Peter Norton his reputation in the first place. SD will rearrange the files on your hard drive so that no file is broken up into pieces and strewn all over the place, a natural occurrence as you do your daily work. It finds all the pieces and puts them together again in a series of consecutive places on the disk. Too bad we do not have a utility that could put magazine articles together, so that no "continued on page 6" notices were needed! The Optimization Wizard is another useful utility, but a rather new one that did not exist before Windows 95. It reorganizes and compacts the Registry, so that this large database can be read and utilized more efficiently and quickly. This is another utility worth the price of admission by itself.

There are at least eight more utilities in the package that are extremely useful. Beyond that, Norton Antivirus (updated every two weeks or so), Cleansweep and CrashGuard are also there. CrashGuard does just that. It intercepts crashes in your system - lock ups such as when everything quits and you cannot even restart the system without hitting the reset button. I have had CrashGuard save valuable data (typing), when it most surely would have been lost without this wonderful program.

There is no doubt about it. Norton SystemWorks 2000 is worth your hard-earned money. Excellence is excellence. It will save you a lot of grief from Windows troubles. The shame of it is, we would not need such utilities if Windows was not so poorly written. Happy computing!

Reprinted, by permission, from the ORC Newsletter, Ozaukee Radio Club, 101 E. Clay Street, Saukville, Wisconsin 53080-1903 (Skip Douglas, KA9DDN, Editor). □

The Automatic Packet Reporting System

By Tom Weeden, WJ9H

Part 9 - Future Possibilities

This series on APRS has attempted to show how existing packet radio stations can be used in fascinating new ways. We have looked at the operational theory behind APRS, using short broadcast packets to convey position and status information about a station or other object, and displaying that information in a variety of ways, including graphically.

From the basic station, using only a TNC and 2-meter radio, to the more complex additions of GPS receivers or weather instruments, we have seen how APRS has breathed new life into 1200-baud packet. While strides are being made toward 9600-baud connected node systems, 1200 baud APRS still remains an inexpensive, robust data system, especially in the mobile environment. But where is this mode going?

All over the country, hams are installing APRS stations at National Weather Service offices to give meteorologists access to the nearly-live weather data being transmitted by area amateurs. GPS-equipped mobile Skywarn spotters can have their locations plotted as they track severe storms. The National Hurricane Center also makes use of APRS data when tracking hurricanes.

APRS has become so widespread that some equipment manufacturers are incorporating it into new radios. Kenwood's TH-D7A combines an APRS-compatible TNC and a text display into a handy-talkie to allow tracking and one-line messaging. You can see

several of these units in use in the Milwaukee and northern Illinois areas. Stations using the TH-D7A usually identify with an SSID of -7 after their call sign.

A device called a "Mic-Encoder" (MIC-E) can be connected to a standard FM voice rig to insert an APRS position packet at the end of each voice transmission. Some repeaters are set up to accept Mic-E transmissions on the repeater's input frequency and redirecting the packet portion of the transmission to the 144.39 MHz packet frequency and muting the packet on the repeater's output. Using this method, a ham can operate APRS and standard voice on a single radio and not annoy the "regulars" on the repeater with packets!

More and more amateur groups providing communications for public service events are using the mapping capabilities of APRS to show positions of vehicles, runners, bikes, and other "assets." It saves a lot of time if a net control station can see the locations of his participating stations on a map display instead of asking each station for his location over the voice net. See how hams used APRS at the 1999 Pittsburgh Marathon at <http://marconi.ece.cmu.edu/aprs/marathon.html>.

APRS can even be used to track the Circus Train! It was used during the July 1999 run from Baraboo to Milwaukee. WB9WRW and others had APRS on board the train's chase vehicle to report the train's position independently from the voice modes. You could see the train's location on your web browser! Try it on me sometime. Point your web browser to <http://map.aprs.net/wj9h-9> to find me while I'm mobile.

There are a few stations on 30-meter HF APRS, but the vast majority of activity is on 2 meters. Unfortunately, if you are in a sparsely populated area far from digipeaters and gateways, VHF APRS may be useless. One of the next steps we will see in the near future is the use of satellites and the Internet to make APRS useful world-wide. Work is being done in cooperation with AMSAT to use amateur satellites such as AO-16 which have on-board 1200 baud digipeaters. According to APRS author Bob Bruninga, WB4APR, only a small modification has to be made to a standard TAPR-2 type TNC to output Manchester-encoded packets which are used on satellites. WB4APR believes that 5 watts is sufficient to be able to get an APRS packet to one of the amateur satellites for digipeating. So "wilderness travelers," boaters, and others could report their position and status with simple equipment from anywhere as long as a satellite is overhead.

Receiving satellite packets is more involved and is difficult to automate. The goal several APRS experimenters are working on is an automatic satellite downlink and Internet gateway. Picture this: a ham vacationing out west in a national park would like to let his friends or extended family know his location from time to time. Using his modified TNC and GPS receiver, he transmits his location on 2 meters via satellite. At a ground station possibly hundreds of miles away, but still within the satellite footprint, that position packet is received and relayed to the APRS Internet gateway where it is posted. Anyone running any version of APRS and connecting to the APRS Internet address will then receive a "dump" of, say, the last 24 hours of position packets and then any new live packets as they come in. If our vacationing ham had some sort of input device like a laptop computer or even the keypad of his TH-D7A, he could key in a short status packet such as: "Leaving Yellowstone tomorrow, see you soon."

There are a lot of possibilities for this exciting mode. To the newcomer, it may seem overwhelming to learn the setup and the operation of the software. It was for me when I first started, since there is no real "manual" for operations, just a big list of help files. One of the reasons I wrote this series, at the prodding of your editor, was to help make APRS operation understandable. I hope you've taken the opportunity to check out at least one of the versions of APRS software and tried it on the air ... or the Internet. A few new stations have popped up in southern/southeast Wisconsin on 2-meters recently, and I've heard about a few more in the works. I hope to see you soon on 144.39!

Continued on page 7



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19" RACK MOUNT

Wisconsin Amateur Internet Addresses

CALL N9AAA	NAME Norbert R. Aurit	CITY Janesville	E-MAIL/URL naurit@ticon.net www.ticon.net/~naurit
K9AAV	Dennis Dworak	Kewaunee	ddworak@itot.com
KG9AD	Gary Luthardt	Marinette	drwho@cybrzn.com
W0AIH	Paul Bittner	Eau Claire	w0aih@eau.net
KC2AK	Stas Wnukowski	Madison	Staskc2ak@aol.com
WA9AKV	Dick Schank	New Berlin	drs@mail.gmtcom.com
KG9AL	Mike Jesse	Shawano	kg9al@wi.frontiercomm.net
KB9AMM	Scott R. Cole	Green Bay	kb9amm@juno.com
KE6ATW	Tim Kubichek	Manitowoc	n6jsx@yahoo.com
KE6ATX	Ryan Kubichek	Manitowoc	n6jsx@yahoo.com
AF9B	Bill Fletcher	Madison	bfletcher@ecb.state.wi.us
AF9B	Bill Fletcher	Madison	af9b@chorus.net
AA9BB	Jim Wiskow	Arcadia	jcwiskow@win.bright.net
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N9BGH	Steve Bukosky	Waukesha	sbukosky@execpc.com ourworld.compuserve.com/homepages/sbukosky/
AA9BJ	Tom Hetzel	Sheboygan	aa9bj@excel.net
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Saint Paul Hamfest: Worth the Trip!

By Don Michalski, W9IXG
ARRL Wisconsin Section Manager



ARRL Wisconsin Section Manager Don Michalski, W9IXG, talks with ARRL Executive Vice President David Sumner, K1ZZ. Photo courtesy W9IXG

As the new Section Manager, I thought it would be a good idea to head up to the St. Paul Hamfest to meet the visiting staff from the ARRL and talk with Riley Hollingsworth, K4ZDH, the FCC's Special Counsel for Amateur Radio Enforcement (SCARE). The trip turned out to be well worth it.

I attended presentations by both Hollingsworth and Dave Sumner, K1ZZ, Executive Vice President of the ARRL.

Dave presented his view on where we are today in the hobby in a talk called "2020". Dave gave his projections about where Amateur Radio would be going over the next twenty years. He said that even though we no longer have a monopoly on communications, we still need to *talk* and be ready as backup to the existing, expensive and often fragile commercial communications networks. He stressed the need to push the concept of *amateur science* to help promote the hobby, and learn through experiments about how the world works.

For future ham radio growth, we have to provide kids with skills and encourage them to get hands-on experience with electronics and communications. Getting an Amateur Radio license is only a first step; the journey has to continue. And, the amateur community must continue to grow within itself through continuing certification programs.

Riley Hollingsworth, K4ZDH, said that 85% of the world is still with out modern communications methods and systems. And he fears that ham radio frequency bands are threatened by foreign governments for use by their broadcast stations. It's risky to assume that simply because the HF bands are subject to propagation variations that nobody would be commercially interested in them. In fact, there are many countries which would dearly love to have our bands! To help keep them, we must make good use of them and continue to use and enforce good operating practices.

He said that we owe it to our young people to make Amateur Radio the finest communications *service* in the world, and he, as FCC's enforcement counsel, has dedicated his efforts to that end.

I share these concerns, and will be talking about them in future articles and in my talks at ham clubs.

Email: <w9ixg@arrl.org>

Section Manager news: <<http://www.eboard.com>>.

Enter <w9ixg> in the "enter eboard" for current SM news. □

The Automatic Packet Reporting System

Continued from page 6

APRS information on the web at: www.execpc.com/~tcweenen.

This is the final in a series of educational and informational articles about APRS. Tom and the BSSS staff hope you found it informative, interesting, and hopefully it piqued your interest in APRS. Tom did a fine job of describing a mode of packet that had seemed a bit mysterious, perhaps even confusing. As we said several times, and repeat here again, APRS' usefulness is limited only by people's creativity and imaginations. Equipment need not be expensive (a simple TAPR-2 clone TNC and a little MFJ Data Radio are all you need - and a terminal program for your computer, of course). Thanks to Tom for writing the series and managing to meet deadlines that pushed him often. □

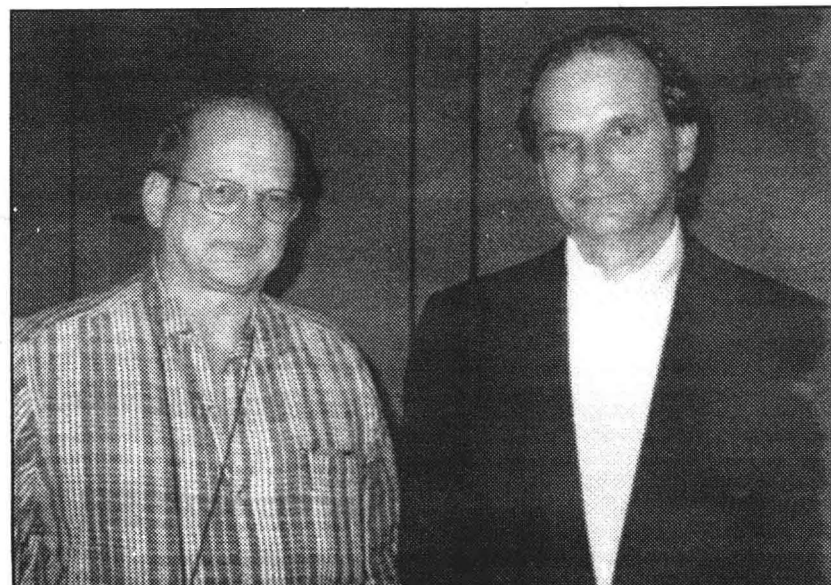
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Retrospective:

The St. Paul Hamfest

By Don Evenson, K9JYX



Baraboo's Don Evenson, K9JYX, left, talks enforcement with the FCC's Special Counsel for Amateur Radio Enforcement, Riley Hollingsworth, K4ZDH, at the St. Paul Hamfest.

Photo courtesy W9IXG

ST. PAUL, MN - David Sumner, K1ZZ, Executive Vice President of the ARRL, and Riley Hollingsworth, K4ZDH, Special Counsel for Amateur Radio Enforcement for the FCC, spoke at the Minnesota Hamfest on Oct. 30 at the St. Paul convention center.

Dave spoke on the subject "Where is Ham Radio Heading"? "As we finish out this century, now is the time to look back before we look forward and clear our palates and look at the total communications environment."

Another statement that Dave made was that hams provide a unique window in the world with long-haul communications.

"Public Service and ham radio will be more important than ever in the future," Dave stated. "Hams are going to provide the important backup for society and telecommunications in the future."

"We are going to need trained, disciplined operators in the event of normal communications overload."

Dave went on to state that "We must not overlook our youth. They are the ones that will keep ham radio alive. Provide kids with scientific outlook through the schools and otherwise. Be willing to work and assist other groups such as radio controlled modelers and other scientific-type activities. Don't be too narrow minded with just ham radio."

Dave concluded his talk with the statement that was also mirrored by Riley Hollingsworth. "Hams provide a service to the public at no cost to the public."

"We must overcome complacency!" is how Riley Hollingsworth summed up his talk at the Minnesota hamfest.

"The majority of hams are from the baby boomer generation born in 1947. We have to find replacements to keep ham radio viable," stated Hollingsworth.

He went on to say hams are an important link in world communications." He added, "Hams give sense and logic to the first hours and days of disasters."

Hollingsworth went on to cover some of the happenings since he took over as special counsel for Amateur Radio enforcement. He gave big kudos to all the hams who supplied communications during hurricane Floyd.

Hollingsworth also stated that since his inception as enforcer he has received over 6,000 letters approving what he is doing and only 2 negatives.

One ham told Hollingsworth that, while stationed in Alaska in the early 1960's, a local Alaska ham accidentally used a profanity while conversing on 2 meter AM. That ham then said, "Oops, sorry Mr. FCC", and continued his conversation. A few days later that ham was in the local Fairbanks radio/ham store when he received a tap on the shoulder and a voice said, "I'll excuse it this time." The ham turned around and there was the local FCC engineer looking at him.

Riley's comment to the story was "Yes, WE are listening."

Hollingsworth also commented on the fact that the FCC is installing remote receive sites that they can dial up and monitor repeaters from around the country. □

Spectrum Protection Act update

ARRL Legislative and Public Affairs Manager Steve Mansfield, N1MZA, reports that the Spectrum Protection Act, HR 783, now has 126 cosponsors. Efforts are under way to line up a Senate companion bill for introduction after the first of the year.

The ARRL Letter

Please see "Capitol Corner" on page 4. Support from hams is important, of course. But additional support from others would be helpful as well, especially from entities and organizations served by radio amateurs.

- BSSS editor

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K9WI	John Kaiser	Oshkosh	srss@baraboo.com
K9WIX	Clancy Meneau (Manitowoc Co. RACES)	Manitowoc	KA9WDX@webtv.net
N9WUN	Charles Savard (Mancorad Club)	Iola	w9wes@gbonline.com
N9WVD	Kirt Krause	Iola	jkaizer@vbc.com
W9WW	Don Haney	Wausau	Kellnersville
KA9WXN	Dave Schank	New Berlin	cesavard@juno.com
WS9X	Ronald Schaden (Mancorad Club)	Two Rivers	n9wvd@geocities.com
W9XT	Gary Sutcliffe	Slinger	www.geocities.com/CapeCanaveral/Lab/8279
N9XVG	Peter Schaeffle	Onalaska	w9ww@arrl.net
KF9XX	Guy A. Boucher	Marshfield	drs@mail.gmt.com
W9YCV	Lester Peterson	Greenfield	schaden@mail.tcbi.com
N9YJG	David C. Peterson	Chippewa Falls	w9xt@qth.com
N9YJJ	Bruce Schaffer	Augusta	www.qth.com/w9xt
N9YLS	Lee Housey	Sheboygan	n9xvg@lse.fullfeed.com
W9YOA	Jack Klein	Beaver Dam	guyboucher@tzn.com
W9YQ	Dwight G. Bosselman	Oconto	LesW9YCV@aol.com
WB9YSD	Steve Polishinski	Sun Prairie	dcpeters@discover-net.net
WA9YVE	John Givens	Ixonia	n9yjj@discover-net.net
NZ9Z	John Meyer	Kellnersville	lhousay@excel.net
WB9ZBE	Donna Menart	Howards Grove	jklein@peoples.net
N9ZET	Fred Diedrick	Edgerton	dgbcms@netnet.net
N9ZIS	Jesse Kujawa	Green Bay	wb9ysd@mailbag.com
KB5ZJU	Phillip N. Lodde	Sheboygan Falls	wa9yve@globaldialog.com
N9ZLU	Jim Bailey	Neillsville	jmeier@mail.tcbi.com
W9ZO	Pat Malloy	Wauwatosa	dmenart@excel.net
N9ZOT	Ken Holeton	Racine	diedrick@jvlnet.com
KA9ZPY	Arne Moxness	Racine	n9zis@aol.com
WB8ZSZ	Rev. Sam Morrison	Plymouth	ploadde@excel.net
KF9ZU	Bette Kratz	Big Flats	liljim@badger.tds.net
K9ZUM	Mike Grady	Mountain	w9zo@arrl.net
K0ZYP	Dave Gegner	Ladysmith	n9zot@powerlynk.com
K9ZZ	Jim Romelfanger	Baraboo	amoxness@execpc.com
Adams Co. ARES			morrison@excel.net
Black River Wireless Assn.			kratzham@palacenet.net
Central Wisconsin Radio Amateurs			k9zum@juno.com
Chippewa Valley ARES			djegner@ladysmith.net
Dane Co. ARES			smokesigs@baraboo.com
Eau Claire Amateur Radio Club			www.palacenet.net/home/kb9n1q
ECResources, Ltd.			liljim@badger.tds.net
Fox Cities Amateur Radio Club W9ZL			www.coredcs.com/~maeiden/cwra.htm
KMRA VE Team (Waukesha Area)			kg9mv@ecol.net
Madison Amateur Radio Clubs			www.danenet.wicop.org/~ares
Marinette/Menominee ARC			kg9mv@ecol.net
Marshfield Area ARS			www.ecarc.org
Menomonee Falls Radio Club			www.execpc.com/~kf9cs/ecr.htm
Milwaukee Area Amateur Radio Society			w9zi.ampr.org
Milwaukee Area SKYWARN Association			103357.3222@compuserve.com
Morse 2000 Project			members.aol.com/staskc2ak/
Near Space Sciences			mmarclub@hotmail.com
Northeast Wisconsin DX Association			www.cybrzn.com/~grizzly/mmarclub/
Ozaukee Radio Club			waltfriant@tzn.com
Racine Megacycle Club			www.execpc.com/fallsarc/K9RHH.HTM
Rib Mountain Repeater Assn.			www.execpc.com/~n91kh
Riverland Amateur Radio Club			svoros@execpc.com
Rock County SKYWARN			www.execpc.com/~svoros
Southern Wisconsin ARES			www.uwec.edu/Academic/
Tri County Repeater Association			Outreach/Morse2000/morse2000.html
UW Space Place Amateur Radio Center			tbcnet.com/~davidc/nss/nss.html
Washington County ARC			www.execpc.com/~w9zt
Watertown Amateur Radio Club			edrate@execpc.com
West Allis Radio Amateur Club			www.execpc.com/~nhar
Wisconsin Association of Repeaters			w9udu@wi.net
Wisconsin Emergency Management EOC			www2.wi.net/~hamradio/
Yellow Thunder ARC			nelles@dwave.net
			www.centurytel.net/rarc/
			www.qsl.net/kb9unx/skywarn/
			kb9unx@qsl.net
			www.qsl.net/kb9unx
			tcra@email.com
			www.qsl.net/tcra/
			www.sal.wisc.edu/spaceplace
			www.nconnect.net/~wcarc
			wa9yve@globaldialog.com
			www.warac.org
			n9uur@execpc.com
			www.gmtcom.com/war
			RACES@DMA.STATE.WI.US
			www.thelox.com/~sschulze

Updated 11/4/1999 - Complete listing

Note that e-mail addresses and Web URLs may be case sensitive. Send additions and changes to wa9p v@execpc.com.

This list is also available at www.execpc.com/~wa9pov/bsslist.html.

FCC reaffirms order to keep North Carolina ham off HF

The FCC has reaffirmed its position that John A. Abernethy, K4OKA, of Hickory, North Carolina, will have to stay off the HF bands until January 22, 2000.

As a follow-up to a station visit last January and alleged malicious interference this past summer, FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth notified Abernethy July 27 that the Commission was modifying his license to prohibit operation below 30 MHz for 180 days, effective immediately.

The FCC's July letter included a copy of a tape recording -- supplied by complainants -- of transmissions said to be of Abernethy's station on July 16. The FCC says the tape consists of deliberate interference on 75 meters and notes that Abernethy was warned about deliberate interference at the time his station was inspected.

Abernethy, 75, subsequently disputed the authenticity of the tape recordings and requested the modification be lifted or lessened. But Hollingsworth told Abernethy this month that the sanction stands.

"We will draw no conclusions from the tape recording, and even resolving the issue of the tape recording in your favor, we have no basis to rescind or change the modification of your license," Hollingsworth said in a November 3 letter to Abernethy.

FCC personnel inspected Abernethy's station January 21 and 22 in the wake of what Hollingsworth has called "longstanding complaints from other amateurs and from our field offices regarding the operation of your station." In particular, he said, the FCC had received "numerous complaints" about profanity, obscenity, deliberate interference, and failure to properly identify.

In his November 3 letter, Hollingsworth said the modification to take Abernethy off the HF bands for six months was based on findings made during the station inspections "including a tape recording that you had played over the air and which you showed to the Commission engineer." He suggested the FCC could have begun license revocation proceedings against K4OKA but decided on the modification instead.

Complaints to the FCC alleged that Abernethy had aired something called the "Porkbutt Song," the FCC said. The FCC says its High Frequency Direction Finding Center in Maryland tracked the transmissions of the "Porkbutt Song" to K4OKA. Abernethy "voluntarily destroyed the tape recording" while FCC personnel looked on, Hollingsworth said.

Hollingsworth reminded Abernethy that violation of the modification order will lead to revocation of his Amateur license. Abernethy may continue to operate on amateur frequencies above 30 MHz.

The ARRL Letter

SELL, SWAP, BUY

WANTED: 60 Hz frequency meter to monitor frequency of generator's output. Please contact Bill Daly, WD9ERN, at (920) 682-2994. E-mail: wd9ern@sol.net. □

The old Family Album



Field Day has always been a place to operate, have fun - and to get balky gear repaired. At least that's been true for the Yellow Thunder Amateur Radio Club of Baraboo. This photo, about 25 years back, shows three hams intently gazing at a schematic diagram: Eric Bjornsen, then WB9HPB; Ken Ebner, K9EN; and Gary Pratt, WB9ECO. The club was at its usual site, Owen Park in western Columbia County.

From the files/piles of K9ZZ

PARTICIPATING CLUBS AND ORGANIZATIONS

The Racine Megacycle Club



Club Station W9UDU • Racine, WI
Dennis Doonan, W9DAD, Secretary
c/o RMC • P.O. Box 3 • Racine, WI 54301-0003
e-mail: w9udu@wi.net

Web: <http://www2.wi.net/~hamradio/>
Voice mail: (414) 552-6RMC • ARRL Affiliated
Providing communications for American Red Cross and ARES

MEETING MINUTES October 11, 1999

The October 11, 1999 regular membership meeting of the Racine Megacycle Club Inc. was opened at 7:34 p.m. by President Rees K9UUT. Vice President Bob, WE9EH, Secretary Dennis, W9DAD, Treasurer Greg, KB9RMA, and Activities Director Kevin, KB9LLV, were present. There was a total of 13 members present.

Secretary W9DAD read the minutes of the September meeting.

Treasurer KB9RMA presented a brief financial report.

Bob, W9EH, presented Greg, KB9RMA, with a gift in honor of his recent marriage.

John, KA9RZL, reminded the membership of the ARES membership meeting at 7:00 p.m. October 20, 1999 at the Racine Technical College.

Larry, WA9JMO, reminded the membership of the upcoming annual QCWA meeting.

Don, KB9HAM, reported on the activity of the nominating committee. Joe, N9BJI, agreed to be the third member of the nominating committee. A report from this committee was promised by the next board meeting.

Steve, K9ZL, reported on the Young Eagles program at the local EAA chapter museum in Racine.

Bob, W9EH, reported on the RMC plans to provide on-line ULS registration for members at an upcoming meeting.

Kevin, KB9LLV, presented preliminary ideas about a possible Christmas party for RMC members.

Rees, K9UUT, discussed the future of the club and listened to complaints by the membership. A heated discussion provided insights to the future direction of the RMC and its membership. John, KA9RZL made a motion that the RMC send renewal membership applications, questionnaires about the direction of the club, and return postage. The motion was seconded by WB9USI and approved by the membership.

Dave, WB9USI, reported on the last hidden transmitter hunt sponsored by the RMC.

A motion was presented by WB9USI to adjourn. The motion was seconded by KB9HAM. The meeting adjourned at 9:37 p.m.

If any past, present, or future members would like to send comments about the Racine Megacycle Club, its direction in the future, and activities you would like to have, please send an e-mail to

<W9UDU@WI.net>

or contact one of the board members.

Submitted by Dennis, W9DAD,
Secretary to the Racine Megacycle Club

Wisconsin Valley Radio Association

Kim Kunze, N9SDL, Secretary

P.O. Box 363 • Wausau, WI 54402

Six Meter Repeater: 51.19 Input/52.89 Output

Meeting Minutes November 2, 1999

Meeting was called to order by KB9DED. Members present: N9NMH, N9TTA, KB9FRB, KB9DZG, N9SDL, KB9MCZ, N9SDI, N9LIA, N9MEA, N9PHC, W9WW, N9WPH, N9NRC, KB9RXA, KB9VBR, KC9NW, KB9OPQ, N9NQW, N3FDE, and KB9RXB.

Old Business

Thanks to all who participated in the Halloween Patrol. It was a nice quiet evening.

Thanks also to the following for providing communications for the Rib Mountain Foot Race: KB9DED, N9LIA, KB9FRB, KB9DZG, N9TTA, KB9VBR, and N9NMH. An interesting time was had by all and we look forward to the race next year.

KB9MCZ, N9SDI, and N9SDL met to discuss preparation of the grant application and are in the process of gathering the appropriate documents to supplement the application.

N9SDL reported that in a conversation with Joe Kamenick, Joe offered to assist us with communication with the new Chief Engineer at Channel 7 and the advisory committee in regard to gaining access to our repeater equipment in the Channel 7 transmitter building on Rib Mountain. He also offered to help us in communicating to the advisory committee our desire to place a new commercial grade 2 meter and 440 antenna and feed lines on the new TV tower in place of the aging antenna and feed line that is present. Joe suggested that we wait until later in December before contacting

them so that they have time to secure a permanent Chief Engineer.

The WVRA has assembled a list of volunteers for the Y2K support of Wausau Hospital which will be onsite and available for emergency communications in the event that the GTE phone system goes down 01-01-2000. Included will be possibly strategic placement of amateurs in the area to provide communication support for doctors on call that evening. Don, W9WW, is chair for this event.

New Business

W9WW, KB9DED, and N9MEA met with a representative of Wausau Hospital to determine the location of the amateur communication center for Y2K support. It will be in a conference room near the birthing rooms and will be wired for emergency power. Communication was tested and reliable communication can be made with the 146.64 repeater from the conference room.

We will also be providing a volunteer at Wisconsin Public Service for amateur communication support.

One other possibility of the need for support for Y2K is with the State Emergency Government. Nothing is firmed up as of this date.

The program for the evening was on Emergency Generator power and Battery Backup power and was an excellent presentation by Kim, N9SDL, and Phil, KB9DZG.

Adjournment: N9WPH and N9LIA.

Respectfully submitted:
Kim Kunze,
N9SDL

Wisconsin Nets Association Ltd.

Art Evans, KA9KLZ, Secretary
213 N. Jefferson • Cuba City WI 53807-1558

WISCONSIN NETS

Net	WNA	Freq.	UTC	CDT	Manager
BWN	Yes	3985	1200	0600	W9RCW
BEN	Yes	3985	1800	1200	KE9VU
WSBN	Yes	3985	2330	1730	WB9WHQ
WNN	Yes	3723	0000	1800	KB9OCZ
WSSN	Yes	3645	0030	1830	N9BDL
WIN/E	Yes	3662	0100	1900	WB9ICH
WIN/L	Yes	3662	0400	2200	W9UW
RCRA	No	01/61 (Mondays CDT)	0130 (Menomonie Area)	1930	KA9OMC
Gr. Bay	No	72/12	0345 (Green Bay Area)	2145	WB9NRK
ARES	No	4.65/5.25 (South East/South Central Wisconsin)	0300	2100	
RACES	No	3993.5	1500 (LSB Sunday)	0900	WA9OAY

WISCONSIN SECTION OCTOBER STM REPORT

This month's comments will be short, perhaps so they will be more memorable. We do a super job on our nets in Wisconsin. We keep up our skills in traffic handling and disciplined net operation. Here's an important reminder.

The receiving station picks the frequency and calls. That's all. Net controls should be aware of it. Seasoned traffic handlers

probably do it by second nature. There's good reason for it, too. The receiving station needs to find a spot clear of interference. The sending station has no way of knowing about locally generated noise, skip, etc. that may be plaguing the receiver. So, when you're sent off frequency to handle a piece of traffic, just remember -- the receiving station finds the frequency, checks to see if it's clear, and then he calls the station holding the traffic. It works a lot better that way.

Don't forget we have a bulletin board for the Wisconsin Nets Association at Eboard.com. Just enter WNA and click "Go."

73.

NETS SUMMARY

NET-QNI-QTC-QTR-SSNS-NM

BWN - 1416 - 1883 - 2325 - 31 - W9IHW
for W9RCW
BEN - 431 - 59 - 813 - 31 - KE9VU
WSBN - 553 - 53 - 767 - 30 - WB9WHQ
WNN - NO REPORT -- KB9OCZ
WSSN - 228 - 36 - 330 - 30 - N9BDL
WIN/E - 242 - 89 - 317 - 31 - WB9ICH
WIN/L - 187 - 50 - 299 - 31 - W9UW

STATION ACTIVITIES

STATION-ORIG-RCVD-SENT-DLVD- TOTAL

W9RCW - 0 - 558 - 13 - 367 - 938
K9RTB - 0 - 428 - 69 - 284 - 781
K9JPS - 0 - 395 - 27 - 314 - 746
W9IHW - 1 - 383 - 68 - 233 - 685
W9YPY - 0 - 265 - 297 - 0 - 562
K9GU - 0 - 183 - 29 - 124 - 336
W9CBE - 0 - 118 - 115 - 2 - 235
N9BDL - 0 - 32 - 67 - 0 - 99
AG9G - 0 - 38 - 43 - 25 - 98
N9KHD - 0 - 39 - 46 - 7 - 92

W9YCV - 0 - 28 - 35 - 14 - 77
W9UW - 1 - 52 - 21 - 2 - 76
K9LGU - 0 - 48 - 12 - 0 - 60
N9CK - 6 - 24 - 24 - 0 - 54
K9FHI - 0 - 2 - 45 - 0 - 47
KE9VU - 0 - 23 - 23 - 0 - 46
KA9KLZ - 0 - 1 - 38 - 0 - 39
W9BHL - 0 - 1 - 31 - 1 - 33
AA9BB - 0 - 0 - 28 - 0 - 28
WZ7V - 0 - 0 - 28 - 0 - 28
K9HDF - 0 - 0 - 26 - 0 - 26
KA9FVX - 1 - 2 - 18 - 2 - 23
W9ODV - 0 - 0 - 22 - 0 - 22
KG9B - 0 - 0 - 21 - 0 - 21
WB9ICH - 0 - 20 - 0 - 1 - 21
N9JIY - 0 - 2 - 6 - 2 - 10
K9UTQ - 0 - 0 - 4 - 0 - 4
W9PVD - 0 - 0 - 1 - 0 - 1

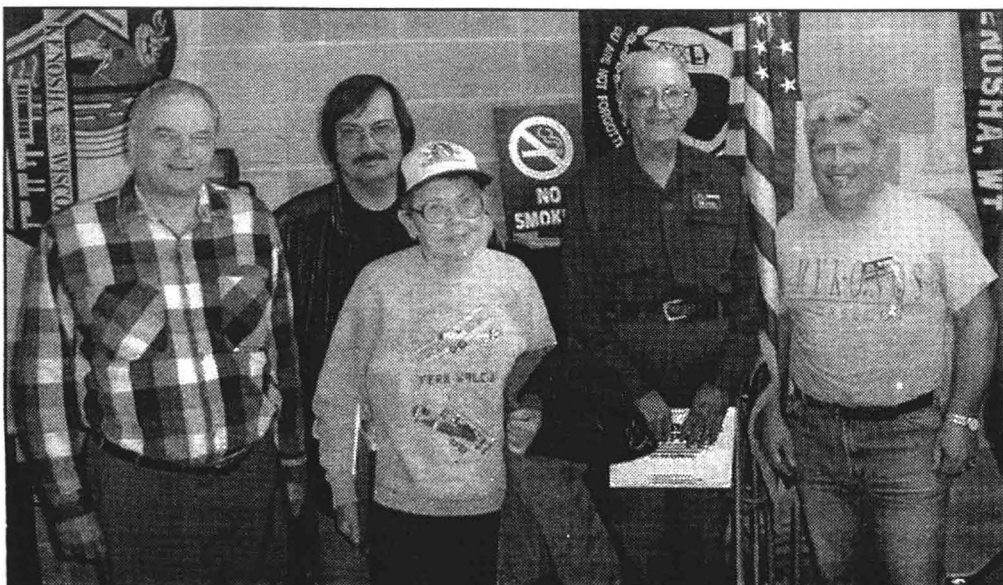
Public Service Honor Roll CALL-1-2-3-4-5-6-7-8-TL

K9RTB-60-24-24-284-0-30-0-30-452
W9RCW-40-0-6-367-0-30-0-0-443
K9FHI-60-24-24-0-0-30-0-30-168
W9YCV-60-24-24-14-0-20-0-0-142
N9BDL-60-24-24-0-0-30-0-0-138
AG9G-60-24-18-25-0-10-0-0-137
W9CBE-60-24-24-2-0-20-0-0-130
K9LGU-60-9-24-0-0-20-0-0-113
KA9KLZ-60-15-0-0-0-30-0-0-105
KA9FVX-60-9-0-2-1-10-0-0-82

Lakeshore Repeater Association

147.270 MHz • Racine, Wisconsin

Larry McCalvy, WA9JMO • 5400 Six Mile Road
Racine, WI 53402-9741
wa9jmo@wi.net



Lakeshore Repeater Club officers are, left to right: Tech Chairman Gene Haney, WB9ZKY; Vice-President and Trustee Dan Miller, KA9OIL; Secretary Fern Fisher, W9LCJ; Treasurer Bob Jensen, W0WLN; and President Larry McCalvy, WA9JMO.

Photo courtesy Larry McCalvy, WA9JMO

The Racine based Lakeshore Repeater Association club is proud to announce its affiliation with the *Badger State Smoke Signals* organization. This action follows the membership's positive vote of last summer and the election of our Y2K Board of Directors.

On October 27th, Lakeshore's membership elected without opposition, Larry McCalvy, WA9JMO, President; Dan Miller, KA9OIL, Vice-President; Fern Fisher, W9LCJ, Secretary; and Bob Jensen, W0WLN, Treasurer. The officers met and appointed Gene Haney, WB9ZKY, Technical Chairman and Dan Miller, KA9OIL, Trustee.

At this reading, our membership should be in possession of our Y2K renewal notice, a questionnaire and a nomination form for the "Ham of the Year" and the "Olie Fox, K9AKG, Recognition of Excellence Award"

for the years 1998 and 1999. Your Board would greatly appreciate your completion of the questionnaire and its return with your renewal dues. We would like to know what you currently think of our repeater system and what changes you would like to see.

The Ham Banquet is scheduled for the second Saturday in March 2000. It will be held at the Racine Yacht Club. The banquet's specific details will be included in January's BSSS column.

The newly elected board will have met with your 1999 officers at the end of November to exchange all club documentation. A list of committee appointments will appear here next month. And if you have any comments or questions concerning our repeater, please give me a call on the repeater or drop me a line at the above address.

73, Larry McCalvy, WA9JMO, President

Mancorad Radio Club

Mary Langer, KB9GOY,
Secretary

P.O. Box 204 • Manitowoc, WI
54221-0204



2-Meter Repeater: 146.01 Input/146.61 Output

MANCORAD MINUTES

November 10, 1999

The November meeting was called to order at 7:33 p.m. by Fred, W6BSF.

The minutes were approved as published in "Badger State Smoke Signals" with a motion by Red, N9GHE, and a second by Bob, KB9INK.

The treasurer's report given by Roger, W9NPX, was approved with a motion by Ken, K9HAG, and a second by Red, N9GHE.

There was a motion made to move the club checking account to Associated Bank where we have our meetings. It was unanimously decided to do so.

The December club meeting on December 8 will be at the club room at City Hall due to a conflict on that night at the bank.

The club received a thank you note from Bill Daly, WD9ERN, for the flowers he received during his hospital stay. We are glad Bill is back to work.

The hamfest committee will give a report at next month's meeting regarding the next hamfest.

Fred, W6BSF, is compiling a list of people who would be available if we get called to assist with communications on New Year's eve. We have been contacted to possibly help out if there are Y2K problems. Contact Fred if you think you would be available to help.

Club dues are due right now. Contact Roger, W9NPX, to pay.

The club Christmas party is scheduled for January 7, 2000 at Cedar Ridge. The cost is \$8.00 per person. The social hour starts at 6:00 p.m. with dinner at 7:00. John Meyer, NZ9Z, will be giving a slide presentation on his Dxpediton to Palau, which should be very interesting. Contact Roger, W9NPX, if you plan on attending. The menu will be chicken and ribs with all the trimmings.

Fred, W6BSF, composed a letter stating the club would be interested in accepting the

offer for club room space at the County Shop on Waldo Blvd. provided there is no problem with antenna stipulations.

The club family picnic has been set for September 30, 2000 at Lincoln Park Cabin #1.

The USS Cobia event has been set for April 29 and 30, 2000.

The club received a letter from Nancy Crowley saying she was pleased how the nuclear plant drill went. She especially mentioned our volunteers - one, in particular, Denise, N4WGK, got special mention for having her hand held with her. Thank you to all who helped.

Carl, N9ZTF, was drawn for the monthly membership drawing. He was not present so the next one is worth \$6.00.

Elections were held and we have a few changes.

President - Fred, W6BSF
Vice President - Dick, N9QFY
Treasurer - Roger, W9NPX
Secretary - Theresa, KB9KXE
Directors - Red, N9GHE
Bob, KB9INK
Chuck - N9WUN

Congratulations to all. We know you will do a fine job.

The meeting was adjourned at 8:30 p.m. with a motion by Denise, N4WGK, and a second by Ken, K9HAG.

*Submitted for approval:
Mary Langer, KB9GOY
Secretary*

MEETING ATTENDANCE

W9NPX - Roger	K9HAG - Ken
N4WGK - Denise	WB9VYO - Vic
KB9INK - Bob	K9WIX - Clancy
WB9MNQ - Lester	N9GHE - Red
W6BSF - Fred	KB9GRC - Tom
WB9OBX - Ken	AA9WI - Paul
KB9GOY - Mary	KB9KXF - Gene
N9UGI - Dave	N9WUN - Chuck
KB9NTL - Don	KB9KXE - Theresa



SHEBOYGAN County Amateur Radio Club

Sky Borkenhagen, N9XRU, Secretary
N6466 Plank Circle • Glenbeulah WI 53023

2-Meter Repeater: 147.06 Output

The November 9, 1999 meeting of SCARC was called to order at 7 p.m. by club President Steve, N9TRK. There were 10 members present.

SCARC meetings are held every second Tuesday of the month in the Red Cross building at 2032 Erie Avenue in Sheboygan.

Steve, N9TRK, noted that the club had received a thank you letter from Aurora Health Care for our help with the Plank Road Health Classic event. They are looking forward to our assistance again next year.

Club Treasurer Mike, K9SJ reported current balance at \$828.65.

Some short term storage space is needed while our basement project in the Red Cross building is being completed. Please contact Mike, K9SJ, if you are able to help out with this need.

Sheboygan packet is back on 144.990! A big thanks to Josh, KG9BO, for his efforts in making this happen. Josh and Lee, N9YLS, gave an excellent packet radio demonstration during the meeting, complete with informational handouts and hands-on experience! Thanks to you both for doing such a wonderful job with the demo.

Each Saturday at 8 a.m. you are invited

to join us at the following venues:

1st Saturday - Jumes, Sheboygan

2nd Saturday - Highway Bakery at Hwys J and 42

3rd Saturday - Jumping Jacks, Kohler Sports Core

4th Saturday - Parkside Restaurant, Sheboygan Falls

5th Saturday - Farm Hill Restaurant, Cty V and OK

See yellow pages for addresses and phone numbers.

Steve, N9TRK, adjourned the meeting at 8:30 p.m.

To sign up for the Sheboygan Hams e-mail list, submit your address to <julian@bongo.tele.com>. All messages sent to this address will be forwarded to all listed subscribers. Thank you, N6ARE, for providing this service.

Quarter Century Wireless Association Southeastern Wisconsin Chapter 162

Larry McCalvy, WA9JMO
5400 Six Mile Road
Racine, WI 53402



The Chapter gathered an hour earlier for our November business meeting at the Wustum Museum of Fine Arts in Racine. Our treat was a guided tour of the new Wisconsin Watercolor 1999 exhibit that was to open the following week for the general public. And a treat it was, for Mr. Peters, our tour guide was very well versed in the subject matter. He explained how the art was selected and displayed for this exhibit.

And for us expert-less art connoisseurs, we received a layperson education in form, style, texture, color and paper material, all in the medium of watercolor paint. Most interesting!

After the tour we assembled in one of Wustum's classroom for our meeting. The topic of interest that consumed the bulk of time dealt with our decision to offer to host

Postal Address: SCARC, P.O. Box 1282, Sheboygan, WI 53082-1282.

NET SCHEDULE

8 p.m. Monday night, SCARC Fun Net, 147.060, PL107.2+

*Respectfully submitted:
Sky Borkenhagen, N9XRU*

the Quarter Century Wireless Association International Convention in the year 2001. Normally, this function is held in the hometown of the hosting Chapter; our offer to the QCWA Board of Directors is to host that convention aboard a cruise ship in the Caribbean. With International Convention participation waning over the last several years, I thought the group needed a shot-in-the-arm to revitalize the attendance spirit.

At the St Louis forum last September, I proposed that if Chapter 162 would be the host, would the members consider holding this hallowed function on a cruise ship? The overwhelming response was not only yes, but a yes with extreme prejudice in favor. It was the topic of conversation on several of the outside bus tours and I was encouraged to make this idea become reality from the majority of conventioners.

Back at our meeting and after fielding all the questions and concerns the membership had, we voted unanimously to offer our chapter as host for the convention in 2001. The offered has been tendered to the International Board of Directors and their answer, which will have been received by the time this article is read, will hopefully have

Please turn to page 12

QCWA Southeastern Wisconsin Chapter 162

Continued from page 11

been YES!

The cruise will tentatively depart from Miami on Saturday the 27th of October 2001 for seven-days with one of the stops at St. Thomas in the U.S. Virgin Islands. A three and four-day cruises are two other options being considered. Cost will be the determining factor, and I believe that the best deal will be a seven-day outing. The current costs for a four-night stay (for Board members) at a convention hotel exceeds \$400; and with meals the total can easily top \$600. For that money, we can offered a vacation of excellent value that coincides with the convention at no additional cost. A spouse, normally accompany the Ham, now has an option of inviting friends and family to participate in a fun vacation and the Amateur Radio Operators can gather guiltlessly for their convention stuff, knowing their spouse and family are well entertained. The possibilities are limited only by one's imagination.

Other business conducted included our Christmas Party arrangements. We will join in the holiday celebration at the Chancery Pub and Restaurant, 11900 108th Street, Bristol, (I-94 and Hwy 165 just north of the Illinois State line) at 12:30 p.m., on Sunday, December 12, 1999. We will exchange our traditional gifts. Gifts whose value should not exceed \$5.00 and wrapped in paper of red for the ladies and green for the gentlemen. I am told we will celebrate another occasion at the same time, but details are limited to those attending.

Our President handed out a draft list of committee assignments for next year and pending additional comments will finalize



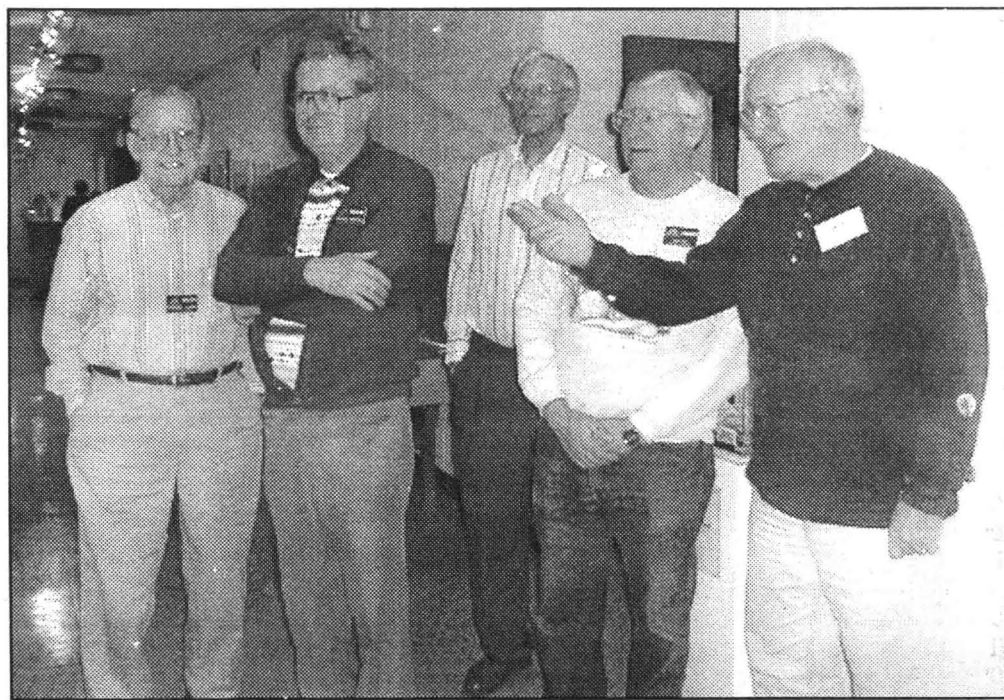
Outgoing President Spencer Clope, W9LDH, (right) presents the QCWA162 Y2K Club Charter form to Larry McCalvy, WA9JMO.

Photo courtesy Larry McCalvy, WA9JMO

same at the Christmas bash. Our Net Control Operator will remain the same Ken Knoff, N9NBC. Why replace perfection!? And Spencer Clope, W9LHD, has agreed to continue his weekly verbal libations on our 147.270 MHz weekly Thursday 9 p.m. net.

QCWA certificate attesting to 65-years of Amateur Radio Licensing are being sent to Ed Westberg, WA9Y, who resides in Florida and Bill Komistra, W9OVZ, our Racine Ham who has been fighting a lingering illness for the past several month. Cards are always welcome and they say, "Hi Bill, just thinking about you, hurry and get back on your feet. You have been missed on the nets and at other functions."

As part of my administration, I would like to create an Activities Committee and ask the majority of our members to serve on it. Its purpose will be to suggest community functions we can participate in. Amateur



Enjoying a tour of the Wustum Museum in Racine are QCWA 162 members Spencer Clope, W9LDH; Chuck Knotek, W9GKM; Ken Knoff, N9NBC; Ron Fox, K9AGH; and Mr. Peters, tour director.

Photo courtesy Larry McCalvy, WA9JMO

Radio demonstrations at school and in malls would be examples of what I have in mind. Our organization possesses a platitude of knowledge in various aspects of our hobby. A knowledge we would like to share with our younger generation and some will hopefully become our future Hams. I am hoping that the committee will come up with the vehicle to accomplish this.

The Southeastern Wisconsin Ham Banquet will take place on Saturday evening, March 18, 2000 at the Racine Yacht Club. Mark your calendars and plan on joining us. We are looking for nominees for the "Ham of the Year, Olie Fox, K9AKG Award of

Excellence" and "Ten-year Service" selections for the years 1998 and 1999. Complete details will follow next month. In closing, I would like to ask you to give some thought over the holidays to who, in your opinion, is deserving of recognition for their Amateur Radio and Community service.

Wendy and I would like to take this opportunity to wish you and your family a most Merry Christmas and a very Prosperous, Healthy and Happy New Year.

73,
Larry McCalvy,
WA9JMO

Hams will get to help NASA with space experiment

If all goes well, Amateur Radio operators will get a chance to contribute to a NASA satellite project by recording the data.

The Plasma Experiment Satellite Test -- or PEST -- at NASA's Marshall Space Flight Center will ride on the Joint Air Force-Weber State University Satellite, or JAWSAT, according to project scientist Nobie Stone. The launch is set for no earlier than December 2. The primary payload will be the US Air Force Academy's Falconsat. JAWSAT will serve as a bus for several deployable payloads and the attached PEST experiment.

The telemetry stream from JAWSAT -- which includes data from PEST -- will be transmitted on amateur frequencies. "Hams will be able to obtain data that characterizes certain aspects of the ionosphere above the D, E, and F layers where most of their signals are reflected," said PEST Project Manager Fred Berry, WA4IYW. "We're going to publish the data format in terms that everyone can understand."

Data from PEST will be using either a G3RUH modem or a GMSK modem. Data rates should be as high as 38.4 kb/s. Data will be transmitted on 437.175 MHz or

2403.2 MHz. NASA will publish instructions for sending in data so the PEST team can use it.

"It's an experiment," Berry said. "We're hoping that high school and college kids will get involved and learn something about the ionosphere and radio propagation."

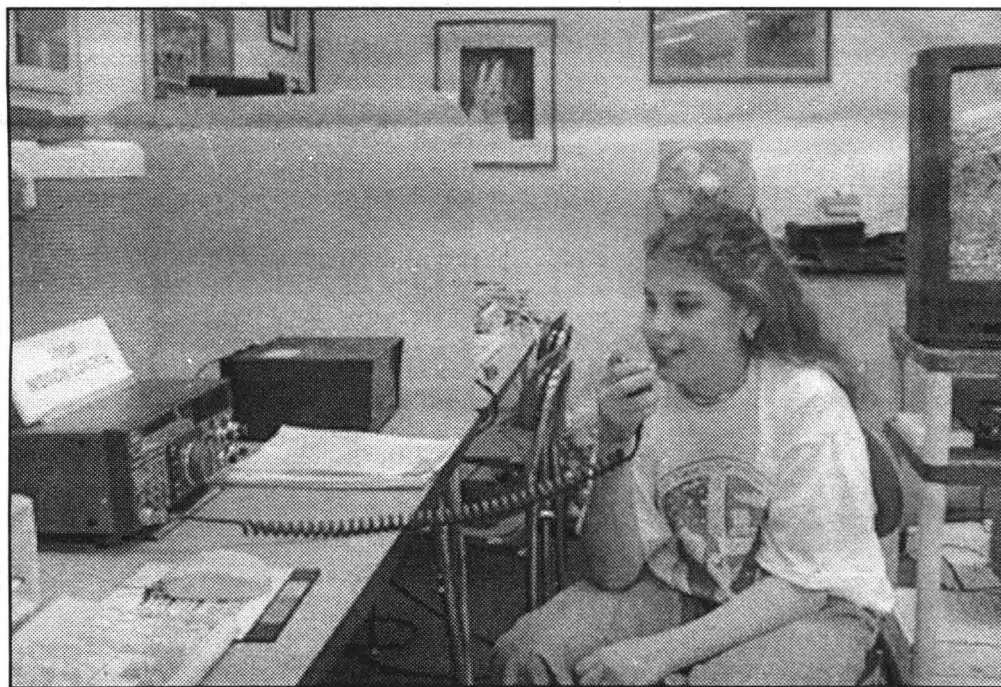
Deployable payloads aboard JAWSAT are the Orbiting Picosat Automatic Launcher -- or OPAL -- and ASUSAT provided by Arizona State University. ASUSAT itself will contain amateur packet hardware and a 2-meter/70-cm FM voice repeater. OPAL will release three tiny picosats -- one of them, StenSat -- will have a crossband repeater aboard that will operate much like the popular AO-27 satellite.

After JAWSAT reaches its desired polar orbit at 700 km (420 mi) altitude, it will be about two weeks before PEST is first powered on. PEST will acquire data for at least a two-month period. For more information, visit

<http://science.nasa.gov/newhome/headlines/ast04nov99_1.htm>.

-- NASA Space Science News in
The ARRL Letter

Dream Flight Wausau



Dream Flight Wausau is an annual week-long program involving fifth grade students from the 14 elementary schools in the Wausau School District. Students take part by assuming the responsibilities of various mission specialists, such as Nutritionists, who prepares meals for "astronauts" on board the shuttle "Condor", a modified school bus. Communicators provide links between Mission Control and the shuttle, as well the various planets. (Each school is a "planet".) The Wisconsin Valley Radio Association (WVRA) provides communication training and support to 150 students for voice communications, packet and Amateur TV (ATV). WVRA also insures proper setup and support of the 14 elementary school packet and voice radio systems. Dream Flight 2000 will be the first week in May. In the photo, an unidentified youngster mans "Mission Control" at WVRA station W9SM. Kim Kunze, N9SDM

NEWDXA chooses 2000 board members

The NorthEast Wisconsin DX Association met November 6, and elected the following officers and board members:

President: George Croy, W9MDP
Vice-President: Mark Michel, W9OP
Secretary: Tom Prust, N9WI
Treasurer: Robert Kallio, N9NUP

Membership Coordinator: John Meyer, NZ9Z
Member at Large: Mike Lawrence, N9UA
Member at Large: David Jaeger, WN9Q
Past President: Skip Caswell, KE9LK.

NEWDXA will meet February 5, 2000, in Green Bay. More info: <www.execpc.com/~w9zt>.

George Croy, W9MDP

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- Silvertone BC/SW model 1954 wood with 6 tubes.

- Zenith model 6G501M battery or a.c. with 6 tubes.

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FREE: Two (2) TI-99/4A computers, equipment, software, books, etc. Call for list. Charlie Bremigan, W9WJL, 3629 Cascade Road, Madison, WI 53704-2247. (608) 244-1310.

RED CEDAR REPEATER ASSOCIATION, INC.**STEVE HART, KA9OMC, SECRETARY****E616 810TH AVENUE****KNAPP, WI 54749****2-Meter Repeater: 146.01 Input/146.61 Output**

Greetings, RCRA members and guests.

The following were in attendance at the October social hour:

KB9LUK	James Kinney
KB9TLV	John McDonald
KF9CU	Arlene Kraft
KA9OMC	Steve Hart
N9PPE	Jeff Cole
WB9PMF	Tim Rose
N9VOY	Bob Rose

KB9LUK, James, has been in contact with science teacher Bill Reiger at Durand, who is interested in ham radio as part of his sixth through eighth grade classes. James received a large package of introductory material from ARRL, and we are anxious to hear about their interest.

Everyone in attendance expressed their concern about our director, NQ9X, Ed Van Sickle, and the latest word is that Ed was able to postpone surgery that was scheduled for November 15.

KB9TLV, John McDonald, reported that he had worked 162 grids on 6 meters and was working for 200 grids. John has 100 grids confirmed, and recently worked Costa Rica, Panama, and Venezuela.

N9PPE, Jeff Cole, suggested it may be time to do some checks of the transmitter on the repeater. Jeff has some equipment that may aid us. Jeff has a Kenwood TS-830S for sale. Call him at (715) 568-1011.

Door prize winners were N9VOY, Bob Rose, and KF9CU, Arlene Kraft, who each went away with a bag of potatoes.

KB9PJL, Bob Rohrsen, has an Alinco DX-70 for sale. Call Bob at (715) 879-4543. Bob is also busy putting up a last-minute tower project.

Some of the equipment donations to

RCRA include a mount for an antenna by K9IAG, Ken Drake, box of miscellaneous and some coax cable by K0DL, Don Lund, enclosures by WB9PMF, Tim Rose, and James Kinney, KB9LUK, along with some wire. Thanks to all.

The RCRA has been receiving some pledge support for the new year. Our financial year runs with the calendar year, so it is time for us to remind those who can to renew their support. We suggest \$15 for individual or \$20 for family, and if you would like a subscription to the *Badger State Smoke Signals* monthly news, add \$10. Please remember to be prompt, as subscriptions need to be mailed to BSSS by December 10 in order for you to get the January issue. Mail your pledge/subscription to the RCRA secretary at the address above. Your pledge also grants free admission to the annual club auction in February.

N0PDD, Bob Stark at Winona, checks into the Monday night net, and reports that the Rochester, MN hamfest will be April 8.

W9QAH, Bruce Walther, is looking for manuals for a Heath IM-1202 VTVM and a Triplet 1295. Call Bruce at (715) 344-9099.

KA9PVY, Ken Reetz at Fall Creek, is helping plan an Epiphany celebration for the Lutheran Laymen's League as part of his volunteer work.

Ken suggested we have a get-together for Christmas. We typically don't meet in December, but it seems like a fair request. The usual place has been good to us, so let's plan to meet at the Peppermill Restaurant at 1414 9th Street, Menomonie, for a social hour on December 28 at 7:30 p.m.

Happy Holidays from RCRA!

Steve Hart, KA9OMC
RCRA Secretary/Treasurer

VAST MAJORITY OF HAMS NOT ULS-READY

Even though registration has been available for approximately two years now, most Amateur Radio licensees have yet to register with the FCC's Universal Licensing System. The ULS Task Force reports that, as of mid-November, 682,212 amateurs still have not registered. This figure includes individuals whose licenses have lapsed but remain in the two-year grace period. The FCC recently said approximately 3% of US licensees had registered with the ULS.

The FCC deployed the ULS for the Amateur Service on August 16, 1999. Amateurs must be registered in the ULS in order to file applications with the FCC—including renewals, modifications, and vanity call sign requests.

Meanwhile, the latest "good news/bad news" scenario from the ULS could go something like this: "Dear Amateur: The good news is that we have granted your requested Group C vanity call sign which you sought 10 weeks ago when you were a General class licensee. The bad news is that when we granted your long-awaited vanity call, we also undid the Advanced and Extra class upgrades you accomplished while your vanity was pending. So, congratulations! You're a General once again."

The ULS Task Force says it recently discovered that the bug occurs when several applications are pending (eg, a vanity application and an upgrade application). The FCC is attempting to straighten out the unintended downgrades and says it will have the operator class of affected licensees corrected within a week.

FCC personnel are currently testing the processing for club, military recreation, and RACES applications and hopes to act on pending applications before the end of the month. Up until now, those applications have been filed on paper and still must be manually keystroked into the ULS prior to processing.

The ULS Task Force also wants amateur applicants to know that if they apply too early for license renewal, their applications will be dismissed. A license renewal must be filed no sooner than within 90 days of expiration, even if coupled with a license modification. This is only an issue for those filing paper applications; the electronic filing system will not let applicants file prematurely.

To register for the ULS, visit <<http://www.fcc.gov/wtb/uls>> and click on "TIN/Call Sign Registration". Paper registration also is possible. For more information, call toll-free 888-CALL FCC (225-5322).

The ARRL Letter

Indian amateurs provide post-cyclone aid

Hams in India were able to play a critical role in providing emergency communication from the eastern state of Orissa, struck by a destructive "super cyclone" in late October. The storm resulted in tens of thousands of deaths, left many more homeless, and created food and water shortages. Troops have been sent into the affected regions, and the US has pledged \$2.1 million in emergency food and shelter aid.

Calcutta VHF Amateur Radio Society Secretary Indranil Majumdar, VU2KFR, an ARRL member, reports teams of amateurs from all over India responded to the disaster. The Calcutta club set up an Amateur Radio Control Room at the shack he shares with his brother, Horey, VU2HFR, running a Drake TR4 transceiver into a three-element beam on 20 and 40 meters. At one point, a dozen Calcutta hams were staffing the facility around the clock.

"This is the first time the whole of India has to come to know and appreciate ham radio," VU2KFR said. He said ham radio provided the initial communication link between the stricken state and the rest of the country.

On November 7, a group of five Calcutta hams took off for the Jajpur District in Orissa in a Land Rover-type vehicle equipped with HF mobile equipment. "The communication was done from the mobile with a dipole fitted like an inverted Vee on the car roof," Majumdar said. The transceiver in the car was a 15-W homebrew SSB rig that the club had put together.

"The entire communication in the state is being maintained by hams—except

for some satellite phones that are operating now and then and facing battery problems," Majumdar said. The disaster communications team has since returned from Orissa as telephone and satellite phone service became available.

Majumdar said the teams handled message traffic relating to emergency food, clothing, and medical needs, road conditions, and health-and-welfare. Similar fixed facilities were set up in other Indian cities—including New Delhi and Hyderabad—and linked via HF.

Majumdar says a group of hams from the National Institute of Amateur Radio in Hyderabad also went to Orissa and set up emergency control rooms in Bhubaneswar, Jajpur and Paradip. Other stations subsequently were set up in other affected cities with VHF and HF capabilities. VU2KFR says VHF links were being used to regional traffic within and between states. There are no repeaters. The hams are using what he called "human relay."

Majumdar estimated that 50 hams in all were participating in the disaster communication effort using their own or borrowed equipment.

One Jajpur official praised the Amateur Radio efforts. In a letter to Calcutta VHF ARS President Dipak Mitra, VU2-DPM, District Magistrate R. Balakrishnan said the radio links were helpful in monitoring the spread of disease and in damage assessment efforts. "I am of the view that the concept of ham radio should be popularized and more and more such groups need to be encouraged," he wrote.

The ARRL Letter, 11/19/99

FCC letter includes operating reminders for nets

FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth recently took advantage of an enforcement-related letter to issue some operating reminders for nets.

On November 3, Hollingsworth wrote Alan E. Strauss, WA4JTK, of Carol City, Florida, to follow up on earlier complaints about the "14.247 DX Group," for which Strauss serves as net control. The FCC had contacted Strauss earlier this year regarding complaints that the 14.247 DX Group monopolized that frequency and interfered with ongoing amateur communications. The November 3 letter included correspondence the FCC received on August 4 that Hollingsworth said conflicts with Strauss's explanation of interference alleged to have occurred to the net in July. Hollingsworth said the case will remain open, and the FCC will continue to monitor net operations.

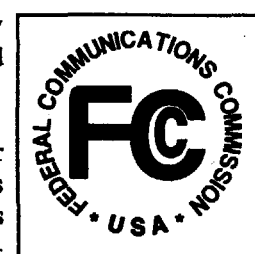
Hollingsworth used the occasion of the Strauss letter to again point out that amateur frequencies are shared, and no net has a greater right than any other ham to a given frequency and cannot take over a frequency unless it is voluntarily relinquished.

If the frequency is not relinquished, Hollingsworth said, amateurs must exercise "good Amateur practice" in choosing another frequency that does not disrupt existing communications. "A net 'taking over' a frequency from existing legitimate communications or deliberately operating disruptively close to existing legitimate communications will be considered to be engaging in deliberate interference," he wrote.

Hollingsworth also told Strauss that the practice of "identifying only by the last two letters of an Amateur call sign is a violation of Part 97" of the FCC rules and that such practice "must not be condoned by your group." Some amateurs had construed the statement—widely reported elsewhere—as a tightening of FCC station identification enforcement policy. Hollingsworth says that's not the case.

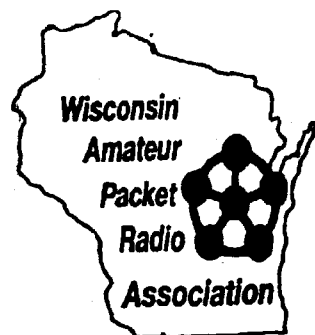
"All we said was that if only the last two letters are given, it doesn't meet Part 97," he said. He pointed out that if a calling station using an abbreviated ID is never acknowledged and given a chance to give a complete call sign, a legal ID would be lacking for that communication. To be strictly legal, stations using a suffix-letter ID always must identify within the first 10 minutes of the communication (and each 10 minutes thereafter) with a complete call sign. Hollingsworth restated the requirements in a follow-up letter to Strauss on November 16.

Hollingsworth this week also reminded net control stations not to encourage rule violations by requiring check-ins to use two-letter IDs without allowing a legal ID at some point within the time limits of the rules.



The ARRL Letter, 11/19/99

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THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association

Allen Schnepf, NØGMJ, Treasurer
Ogema, WI 54459

Andy Nemec, KB9ALN, Editor • 453 Cottage Grove Avenue • Green Bay, WI 54304 • e-mail: kb9aln@juno.com

WAPR News - December, 1999

Hello, all. I hope you had a pleasant Thanksgiving and are looking forward to a happy holiday season. On behalf of all of the board members of WAPR, Happy Holidays. And to those of you who have supported WAPR in the past and present, a special year-end thank-you is in order. Your help is appreciated!

With the approach of the holidays, a lot of us find ourselves reflecting on the past and looking toward the future. This year is, of course, special. We are fast entering a new millennium, which causes us to look back and forward with special interest.

After all, it wasn't until this century that the technology that we use in our hobby came into being. Our particular niche in this hobby did not even come into widespread use until the 1980s. When we look at the march of history, 20 years is but a couple of footsteps. In our lives, it is significant, of course, and so it is in this hobby and our part of it.

We at WAPR have been looking forward, too. There still is a serious need for a complete Wisconsin packet radio network, and WAPR recognizes this. As we go into the next century, WAPR is committed to doing whatever it can with it's limited resources to see this complete network a reality.

Toward that end, WAPR has been an active participant in the construction of the Ogdensburg node stack in Waupaca County. I am pleased to let you know that the folks in Waupaca county have been hard at work and have a node stack to show for it, and it is on the air!

The backbone node, #446OG:N9WBR-4 and the LAN node, WIWAUP:N9WBR-2 have been activated and are ready for service since the middle of November. A check from the Fox Valley node stack operated by AI, KB9BYQ shows a good link to this node. There is a weak link to #RUD4:W9DQA-5, but this should be taken care of in short order. So far, it has been usable for mail forwarding, as well as node-hopping most of the time.

This opens up a path to our friends in Waupaca that has not been in existence for almost 10 years. Not only does Waupaca have a node stack now, but Aaron, KB9QWC has his BBS in operation as well. So it appears that the efforts of AI NØGMJ, Joel N9BQM, Jeff N9WBR, AI KB9BYQ, Aaron KB9QWC and the rest of the Waupaca gang have paid off well. Congratulations on a job well done!

In other news, the Sheboygan BBS and node stack is operation and seems to be a stable path from north to south. Josh, KG9BO has this set up and is in the process of configuring things for optimal performance. So far his BBS is operational and he welcomes your connect. Look for WISHE:KG9BO-4 on the "nodes" list of your local LAN node.

Last month I also reported on the loss of the Green Lake node stack. Right afterward, Jack KB9WC dropped me an E-Mail message and informed me that like Mark Twain, the rumors of the demise were premature. He's the president of the Green Fox Amateur Radio Club and he tells me that the node stack was discussed at a recent club meeting.

The club decided to retain the node equipment and reserve tower space for it at their voice repeater site. All of this as a service to the Amateur Community. Which is indeed commendable, considering that none of their club members is involved with packet anymore. Recently, the repeater tower was struck by lightning, which apparently affected the node stack. While the repeater is back up using temporary equipment, the node stack is still in need of repair. Currently, WAPR is attempting to provide some assistance to get the node stack back on the air, if needed. Thanks to Jack for his note, and to the rest of the Green Fox Amateur Radio Club for their service to the ham community by providing the node stack.

I also received an inquiry regarding the start and ending of memberships.

This comes in the wake of our recent treasurer changeover and the catch-up work that was needed to bring everything up to date. The question involved when a membership started, and when it ends, and how long the accompanying subscription to the Badger State Smoke Signals runs.

Membership and subscriptions may expire at two differing times. WAPR membership runs from July through June of the following year. When you send a check in as your membership dues and wish to subscribe to the Badger State Smoke Signals, it is assumed you are joining for the current membership year. If you join in September of 1999, your membership expires with all other memberships at the end of June, 2000. Your Badger State Smoke Signals subscription runs for 12 issues. If you got your first issue in October of 1999, your last issue will come

in September of 2000.

Of course if you already had a subscription to Badger State Smoke Signals that was due to expire soon (but had not yet), your WAPR subscription to the BSSS would take over when your current subscription expires.

There may be special circumstances regarding the timing of your membership as it relates to when you mailed your check, and when it was cashed. The WAPR board is more than happy to answer any questions, and resolve any membership issues. If you have a question about your membership, please do contact myself, AI NØGMJ, or Joel N9BQM. We'll be sure and try to answer your queries as soon as possible.

Hope this clears up some confusion. In an effort to avoid confusion, I recommend you read the short article concerning the procedure for sending packet mail to the Wisconsin Division of Emergency Management elsewhere on this page. This is important if you plan to operate in the coming Y2K emergency operations that so many hams are preparing to engage in at year's end. There is a process and a few pointers you should know about this. If you operate a BBS, please pay special attention so that messages can be effectively routed to the D.E.M. ham shack BBS.

And that is all for this month. Until next time, 73 from Andy

Linux and Packet Radio - Part 3

By Andy Nemec, KB9ALN

In part two of our series, we took a look at how Linux looks and operates, and took in some general operating system concepts. This time out, we will specifically discuss Amateur Radio and Linux, with some basic configuration concepts.

Kernel-Based AX.25 Operation

In part two, it was mentioned that AX.25 packet radio services can either be kernel-based, or application based. In the first method, the operating system itself manages the basic levels of AX.25 communication - listening for connections, sending out connection requests, and talking to the TNC. In the application-based system, a separate program is run by Linux that handles both basic AX.25 communication, as well as the actual AX.25 application programs. AX.25 applications include a BBS or a simple packet mailbox, a communications terminal or "host" program, or an APRS program.

The kernel is the actual operating system - it talks to your computer hardware and peripherals, and listens to it. It manages the processing of data inside your computer on the most basic level. It is the link between your command interpreter (like the MS-DOS COMMAND.COM) and the computer's subsystem. MS-DOS has a kernel, as do other operating systems. The Linux kernel can be custom manipulated to make it do specifically what you want it to do. You can make a small, lean system with basic capabilities, or make a larger, powerful server with Linux.

In the case of Linux kernel-based operation, one has to go through a process called "kernel configuration and compiling" to be certain that AX.25 communication is supported. Most Linux distributions that are sold do not activate the AX.25 system by default - you have to set the kernel up to use the capability. The actual process of making a kernel is too involved to recount here, there are help documents widely available that will guide a user through this. It is not terribly difficult, but does require some attention to detail and reading.

In any event, you must use the proper version of AX.25 support for your kernel.

What Kernel do I have?

That depends on your version of Linux, how old it is, and who packaged it. Note that this does not mean the seller's version number (like "Red Hat 5.2"), but the software version number of the kernel. If you have a computer set up with Linux, the command: uname -a will tell you this. If you have not installed it yet, and are looking at a particular version, then you will have to determine the kernel version based upon what the vendor tells you. Generally speaking, a kernel version of 2.0.42 or lower is safe to use with AX.25 kernel-integrated support. This includes Red Hat version 5.2 and lower. Red Hat 6.0 does not work too well for this purpose as of this writing, but will be corrected at some time soon. Other distributions may differ, so check carefully before you buy.

AX.25 packages

As was mentioned before, the kernel AX.25 support has to be enabled through the process of kernel configuration and compilation. Once this has been done, you may now select a package of AX.25 applications.

This is all based again, on your kernel version. Each package of basic AX.25 application programs is numbered similarly to kernel versions. For example, kernel version 2.0.36 will require versions of AX.25 program packages that are numbered 2.0.36 to 2.0.42. In short, the AX.25 program package version number means that it will work with that kernel version or one of a lower number. However, it is best to stick with the same version number as that of your kernel.

Once you know the version number, the most convenient form to install it is in the Red Hat Package Manager format, called RPM. This is a big file that is very similar to a self-extracting PK-ZIP file, with an automated basic installation process. Another method involves extracting a large file and compiling all of the necessary programs. Unless you are a very experienced Linux or Unix user, this will be tough and time-consuming. Try and stick with the RPM. If you don't have it, get it, it is very useful.

Configuring AX.25 kernel-based programs

There is plenty to configure in your new packet system after you have successfully installed the AX.25 package. You have a number of files that configure your keyboard console, your personal mailbox, a Net/Rom node (not recommended unless you are operating a node) and perhaps a BBS or APRS setup. There are several files that you will need to edit in order to successfully operate, and they are contained in the /etc/ax25 directory of the machine. While they are very similar from version to version, the configuration parameters are slightly different. For that reason, there are a few README and informational files to help guide you in the process.

Application-Based AX.25

This method does not require the kernel configuration and compilation process, and is less version-dependent than kernel-based AX.25 support. In this situation, the AX.25 support and actual application programs (like the terminal, mailbox, APRS and BBS) reside in the same program that is run by Linux. It is more comparable to a stand-alone packet program that is used in DOS or Windows.

An example of this would be the BBS program JNOS. JNOS is very powerful, and includes all of the usual features of a BBS, and more. While some operators find it to be "overkill" for them, it can be scaled-back to provide a smaller system that is better suited to what most people do on packet radio.

There can be more configuration to JNOS than with kernel-based programs - not any harder or easier, just more. That is because you are configuring both an AX.25 support system and a rather fancy application. There is, like any software, plenty to read about when you are configuring JNOS, but there is also a large user-base that is helpful if problems are encountered.

Advantages and Disadvantages of Each System

The advantages of kernel-based AX.25 support are a little speed gain, less configuration, and performance improvements that come with kernel upgrades.

Disadvantages are security and capabilities. Security is an issue because anyone who connects has the use of the operating system and whatever programs you may give them permissions to use. Clever people can use this to mess with your computer if you are not totally vigilant. This is not too likely to happen to you in a packet radio setting, but it may be something to consider if you have had problems like this in the past.

Advantages to the application-based support are one central program doing all of the work, more BBS capabilities, and the ability to minimize security problems. Having one program doing all of the work is not important as it sounds until you have to configure it. While JNOS uses more configuration options than most kernel-based support applications, the files are grouped on a common file tree that can also be segregated from the rest of the Linux system. In addition, it has it's own security setup.

Disadvantages include possibly having to wade through a lot of documentation about configuration just to conclude you don't need a particular feature. Another is that if you wish to link it to the standard Linux networking support, the operation is a bit clumsy. This is because the

application duplicates some of the services contained in the kernel (such as the handling of TCP/IP).

Conclusion:

What you wish to run on a Linux system can only be answered by you - What do you need, and what do you want to do in the future? Once armed with the proper information, you should get a much clearer idea of what you want. Here are some dandy sources of information for you. Note the mixture of

upper-case and lower-case letters here, you must use the proper case.

For general ham radio program information, try: <http://sunsite.unc.edu/mdw/HOWTO/HAM-HOWTO.html>

For AX.25 installation instructions, try: <http://sunsite.unc.edu/LDP/HOWTO/AX25-HOWTO.html>

For information on configuring and compiling a kernel: <http://sunsite.unc.edu/LDP/HOWTO/Kernel-HOWTO.html>

For information concerning JNOS and how to get it: <ftp://pc.usl.edu/pub/ham/jnos>

This directory contains all kinds of information, JNOS itself, and the zipped document packages. I recommend getting the JNOS document package, as it has a vast deal of helpful information not only about JNOS, but TCP/IP in ham radio in general. There are also referrals to other pertinent information in there as well.

That's all we have for this part of Linux in Ham Radio. Next month, we will add one more concluding part to the series, as there is much more to tell. Until then, 73 from Andy, KB9ALN.

Information on Y2K Packet Messaging with the Wisconsin D.E.M.

Many of us this year will be spending our New Year's eve in front of microphones, monitors, and keyboards rather than wearing a party hat. If you plan on helping out by using packet radio, you will doubtless want to maintain contact with the Wisconsin Division of Emergency Management (D.E.M.). We present this as a reminder to you in hopes it will make life easier when the Y2K operations hit the fan, so to speak.

The D.E.M. Ham Radio BBS is WC9AAG.EN53JA.WI.USA.NOAM. It's an MSYS BBS that is accessible through the ARES node ARWEM that operates on 145.610 MHz. It is also accessible through the backbone network in most areas.

One thing you should do well in advance of the event is to register at this BBS if you intend to connect with it during the event. Even if you don't, it's better to be safe than sorry. If you need to access this BBS through a lot of network nodes, you may wish to set the XC parameter. This tells the BBS that you do not want to get a big category listing when you log on. If you are familiar with the basic MSYS BBS commands, set the X parameter. This gives you a shorter command line, and shorter packets travel best through a long line of network nodes.

Of course you don't need to actually connect to the BBS to get a message there. You can also connect to your local BBS and send a message to: SYSOP@WC9AAG.EN53JA.WI.USA.NOAM. Because it is a Sysop message, a notification of its arrival will appear on the screen, so that operators in the state ham shack will be aware of its arrival and can read it right away.

If you plan to send a message to be forwarded along the BBS-network, please contact your sysop and have him or her do these things:

- 1) Make certain that WC9AAG is recognized as a BBS by your local BBS.
- 2) Set forwarding of messages to go to WC9AAG as being forwarded immediately, or at least every 15 minutes.
- 3) Make tests to be absolutely certain messages will arrive here.
- 4) Don't overlook the Y2K vulnerabilities in his own system. A BBS that crashes due to Y2K problems while you are in the middle of Y2K emergency support may be ironic, but also could mean real embarrassing problems.

If you or your sysop is having trouble with any of these details, contact Mack, N9NTB, the State Amateur Radio Liaison to the WEM via E-Mail at: rac@dma.state.wi.us. If he does not know the answer to your question, he will certainly refer you to someone who can.

Here's to a Very Happy New Year - with no Y2K problems!

73 from Andy, KB9ALN



Yellow Thunder Amateur Radio Club

WB9FDZ (Original Club Call)
K9ODK (Robert L. Prine Memorial Call)

Raymond J. Matlosz, N9MLZ, Secretary
450 West 2nd Street • Reedsburg, WI 53959



The November 2, 1999 meeting of the Yellow Thunder Amateur Radio Club, Inc. was called to order at 7:40 p.m. by Steve Schulze, (N9UDU), club president.

After roll call was held the minutes of the October meeting, and the treasurer's report were accepted.

OLD BUSINESS: A discussion on the club owned equipment list was held. Tom Harrison (N9PQJ) read a partial list that Bill Hommel (KA9QFJ) is in possession of. Since Bill is moving it was suggested that the equipment be gathered and stored at Steve Schulze's place.

NEW BUSINESS: This year's Christmas party will be at Bill (N9KXX) and Ann (N9PQL) Klinkner's home on December 11. Final plans will be discussed at the December 7th meeting.

A motion was made and carried to keep the YTARC meetings on the first tuesday of the month, in room 18 of the Baraboo Civic Center.

Jim Paul (N9LKY) reminded everyone that the BATS meeting would be held on November 4 at 7:00 p.m. at the Channel 15 Offices.

Brad Pointon was kind enough to offer a spot on his communications tower to YTARC for its 2 meter repeater. This site would give the repeater a very wide range of coverage. Jim Paul (N9LKY) made a motion and Art Kleefisch (W9WSS) seconded the motion, that the club go ahead with the purchase of the antenna and combining

filters necessary to get the repeater on the air. The motion passed unanimously. A special thanks to Art Kleefisch for all his help with this project.

Buck Night winner was Jim Paul (N9LKY) who graciously donated it to the refreshment fund.

The following members and guests were present at the meeting:

Leonard Wagner	N9XJG	Baraboo
Art Kleefisch	W9WSS	Baraboo
Peter Sweeney	WD9JIB	Reedsburg
Dave Estes	KB9QED	Reedsburg
Thomas Harrison	W9PQJ	Reedsburg
Ken Johnson	K9DZG	Mazomanie
Jim Paul	N9LKY	Baraboo
Brad Pointon	N/A	Baraboo
Bill Klinkner	N9KXX	Sauk City
Carol Wagner	N/A	Baraboo

NEXT MEETING: Tuesday December 7, 1999 at 7:30 p.m., Room 18, Baraboo Civic Center.

HAPPY 30TH, YTARC!

AMATEUR RADIO CLUB NOTICE

A meeting of temporary officers and executive committee members was held on Monday, October 27, 1969 at the home of Harv Hamer, K9YHO, temporary president of the amateur radio club. Present were K9YHO, Temporary VP Gerry Von Klein, WA9GYF, Reedsburg, Temporary Sec/Treas. Jim Romelfanger, K9PKQ, Baraboo, Executive committee member Tom Luck, WN9BPS, Prairie Du Sac, and temporary chairman Ken Ebner, K9GSC, Portage. Absent was committee member Bob Garske, K9JMP, Poynette, who was unable to attend due to football practice. (He coaches.)

Purpose of the meeting was to draw up a proposed constitution and by laws. This was accomplished, and the constitution and by laws will be voted on by the membership at the next meeting. A copy of the proposed constitution is included with this notice.

Also under discussion were the suggested names for the club. We have four suggested names. We're looking for more, so when you come, bring 'em along and we'll put 'em in the bag with the others.

Included too is a membership application blank, which you may fill out and return to me. You will notice that the first six months' dues should be attached. Dues were set up on a semi annual basis at the directors' meeting and will be five dollars semi annually. This, too, is subject to discussion and vote by the membership, but it was felt that to be able to provide an adequate and interesting series of meetings and activities, this would be the best way. Dues will be due and payable in January and June, meaning that any dues paid now would be valid until June, 1970. Associate members (No valid FCC amateur license) are three dollars semi annually.

The next meeting is scheduled for Tuesday, November 11 at 7:30 PM at the Baraboo Municipal Building at the corner of 4th and Ash Streets in Baraboo. It is possible we may have missed someone in our mailing, so let your friends know.

VY 73, Jim Romelfanger K9PKQ, Temp. Sec/Treas. 117 1/2 4th St. Baraboo, Wis. 53913

The Baraboo-based Yellow Thunder Amateur Radio Club had its 30th birthday in October. Reproduced above are the minutes of the organizational meeting at which YTARC was formed. The meeting was at 808 Walnut Street in Baraboo, home of K9YHO. Temporary vice-president WA9GYF has been a Silent Key since the early 1980s. The remainder of those mentioned are still around in one form or another. This notice was printed on a mimeograph in then-K9GSC's basement. He's known now as K9EN.



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SWAPFESTS



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Sponsored by MARA/W9HSY
P. O. Box 8890 Madison, WI 53708-8890
Swapfest Information Line: (608) 245-8890

**SOUTH MILWAUKEE AMATEUR RADIO CLUB
SWAPFEST 00**
July 8, 2000
(Held every July)
American Legion Park
Shepard Avenue • Oak Creek, WI
(414) 762-3235 Extension: Ask for Verne
P. O. Box 102 South Milwaukee, WI 53172

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**LAKE SHORE HAMFEST
AND COMPUTER SWAPFEST**
Manitowoc County Expo
Intersection of Hwy 42-151 and I-43 on Cty Highway R
Saturday, May 13, 2000
For more information, call:
Red, N9GHE • (920) 84-3733
Dick, N9QFY • (920) 882-9264
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email: smokesigs@baraboo.com
Write: Jim Romelfanger, 412½ Ash Street
Baraboo WI 53913-2501

**Eau Claire Amateur Radio Club
W9EAU HAMFEST**
Saturday, June 10, 2000
For Information Contact:
Jim Staatz KG9MV at 715-838-9108
P.O. Box 1867 Eau Claire, WI 54702-1867
kg9mv@ecol.net <http://www.ecarc.org>

Racine Megacycle Club
Visit us on the Web!
<http://www.w9udu.org>
Mail: PO Box 3 Racine, WI 53401
Phone: 262-562-6762
E-Mail: w9udu@w9udu.org
Contact us or keep checking our web site for details on upcoming events.

**Ozaukee Radio Club
22ND ANNUAL RADIO AND
COMPUTER SWAPFEST**
Saturday, May 6, 2000
8 a.m. to 1 p.m. • Circle B Recreation Center
Intersection of Highway 60 and County I
Exams by Badger Examiners, c/o Gary Sharbuno,
5119 W. Willow Rd., Brown Deer, WI 53222
Swapfest sponsored by the Ozaukee Radio Club
1702 Holly Lane, Grafton, WI 53024

Circus City Swapfest
Sponsored by The Yellow Thunder Amateur Radio Club
Saturday August 12, 2000 • 7 am - Noon
Sauk County Fairgrounds • Baraboo, WI
Vendors • Concessions
Camping • Free Parking
Tail Gate Area
\$4 - Advanced
\$5 - At Gate
8 Foot Tables - \$5
Steve Schulze, N9UDO (608)358-2313/358-4777
<http://members.baraboo.com/sschulze/hamfest.htm>
Bill Klinkner, N9KXX (608)643-6908/643-6453

Red Cedar Repeater Association, Inc.
AUCTION
February 22, 2000 • 7:00 p.m.
American Legion Post 53 • 634 Water Street
Eau Claire, WI
CONTACT: Steve Hart, KA9OMC E616 810th Ave.
715-665-2374
Knapp, WI 54749

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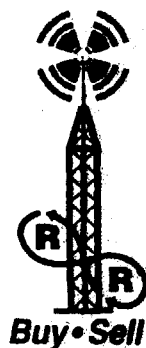
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